

# PSYCHOLOGICAL ABSTRACTS

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# PSYCHOLOGICAL ABSTRACTS

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## GENERAL

3600. Berky, I. *Az igazság fogalma P. Á. rendszerében.* (The concept of truth in the system of Akusius Pauler.) *Athenaeum*, 1932, 18, 153-186.—*P. Ranschburg* (Budapest).

3601. Blumenfeld, W. *Sinn und Unsinn.* (Meaning and meaninglessness.) Munich: Reinhardt, 1933. Pp. 110.—Five types of meaning (*Sinn*) must be distinguished: the semantic, telic, eidetic, logical and motivational. Semantic meaning is found in the personal duality of a conventionalized, asymmetrical, intransitive and atemporal relation between a symbol (or sign) and the thing symbolized. Telic meaning involves a personal unity (as opposed to the foregoing duality), and is an asymmetrical, transitive and temporal, though non-spatial relation between two events or processes. Eidetic meaning is found in the relations of part and whole, while logical meaning occurs as a relation between propositions and their premises. Motivational meaning refers to the relation of behavior and its situation or condition. Each of these relations is distinct from all the rest and none can be reduced to any other. Likewise all are coordinated with corresponding types of meaninglessness (*Unsinn*). The discussion then proceeds to consider the psychological processes involved in the apprehension and creation of meanings and their opposites. The role of meaninglessness in comedy is discussed. Corresponding to the 5 categories of meaning and meaninglessness are: puns, comic situations, the grotesque, jokes and pure humor. Combinations of these yield still further types.—*W. Blumenfeld* (Dresden).

3602. Cattell, R. B. *Psychology and social progress* London: Daniel, 1933. Pp. 418. 15/-.—All social groups follow some sort of ideal of social progress. The content of such an ideal may vary greatly from case to case, but the attempt to realize the ideal has led inevitably to the immense practical problems of civilization. The first of these problems concerns race and nation. The case is stated for innate racial endowments of an emotional and intellectual order. But nations are a conglomeration of races, and national competition can have no certain outcome unless pure racial groups are somehow made independent. The second problem concerns rich and poor. All class distinctions are based upon innate differences, but many modern tendencies lead to the decay of the "higher" classes within social groups. These tendencies must be checked. We need a practical eugenics. The third problem concerns morality and natural science. Morality is constituted by the conditions according to which a social group can attain its goal. What the conditions are can be understood only by the aid of scientific research. Existing machinery

for getting citizens to obey the moral laws of a group could be much improved by the practical application of psychological knowledge. The fourth problem concerns "Progress and the Presence of God." "The great task of culture to-day is to re-construct a totally inadequate and outworn Church and creed in true accordance with the new conceptions of morality and religion which science is revealing." The fifth problem concerns the relations of men and women. It is a primary task of psychology to provide knowledge which will make "mate-selection" more successful than it has been. Complete economic freedom for women is highly desirable. Further problems are constituted by the press, by political organization, by the study of history and by more or less popular literature. These all pretend to be guides to social progress. But they are "false beacons." Probably the most misleading light of all is philosophy. It is time to let psychology show the real path. Two chapters deal with "The Control of Destiny" and "The Conquest of Obstruction." We must have government by psychologists, sociologists and biologists. We must also have universal regulation of birth rate. We must have a sensible and psychological system of education. Finally a plan is put forward for a voluntary eugenic society which will attract the best minds and characters everywhere.—*F. C. Bartlett* (Cambridge, England).

3603. Chestov, L. *Dans le taureau de Phalaris (le savoir et la liberté).* (In the bull of Phalaris. Knowledge and liberty.) *Rev. phil.*, 1933, 58, 18-60.—*Math. H. Piéron* (Sorbonne).

3604. Claparède, E. *La psychologie fonctionnelle.* (Functional psychology.) *Rev. phil.*, 1933, 58, 5-17.—Classical psychology was little interested in the causes of mental activity and its direction. The author believes that psychology is a part of biology, and that it must not neglect the dynamic and biological views of mental life. The central problem of biology is that of adaptation; the central problem of psychology is that of behavior. But behavior is a sort of adaptation, influenced by necessity. To put the functional problem is to seek not only the role of the phenomenon, but in what circumstances it arises, and what situation engenders it; this fruitfully orients researches relative to the structure and mechanism of this process. The author isolates the major functional laws: the law of need; the law of extension of mental life; the law of apprehension by consciousness; the law of anticipation; the law of momentary interest; the law of trying; the law of reproduction of likes; the law of functional autonomy. The author points out that the functional point of view, convenient and useful, implies no adherence to finalism, and that it is a convenient hypothesis both for tying up facts and for foreseeing them.—*Math. H. Piéron* (Sorbonne).

3605. Denton, F. M. A new device for the measurement of time intervals. *J. Exper. Psychol.*, 1932, 15, 598-600.—A circuit employing the constancy of the time lag in ballistic galvanometer or D. C. milliammeter for time measurement.—S. Renshaw (Ohio State).

3606. Döring, W. O. *Die Hauptströmungen in der neueren Psychologie.* (The principal currents in modern psychology.) Leipzig: Dürr, 1932. Pp. 132. RM. 2.70.—The author wishes to bring order into the manifold currents of thought in modern psychology. He attempts to prove that ever since the turn of the century there has been a definite development away from the atomistic and mechanistic "natural science" psychology and toward the "mental science" psychology which lays emphasis on totality and teleology. He believes that the beginnings of a synthesis between these two opposed tendencies are already apparent. He discusses the following doctrines: association psychology, apperception psychology (Wundt), the Würzburg school, Gestalt psychology (Berlin school), the psychology of totality (Leipzig school), behaviorism, psychoanalysis, individual psychology, characterology, "mental science" (*geisteswissenschaftliche*) psychology, "life psychology" (*Lebenspsychologie*), and personalistic psychology. The author's procedure is to develop the essential and characteristic ideas of each school on the basis of the works of its leaders or outstanding representatives. At the end he tries to show that all these different currents of thought converge upon personalistic psychology as a sort of middle point. William Stern is right in maintaining that a common aspect, which may be called the "personalistic" aspect or aspect of totality, is recognizable in the whole modern trend of psychology.—W. O. Döring.

3607. Farrar, C. B. Edward Nathaniel Brush. *Ment. Hygiene*, 1933, 17, 289-293.—Obituary.—H. S. Clapp (Children's Village, Dobbs' Ferry, N. Y.)

3608. Gaeher, P. F. A two-field stroboscope. *Science*, 1933, 77, 412-413.—P. Seckler (Clark).

3609. Gergö, E. *Materialista lélektan alapvetés.* (Foundations of materialistic psychology.) Budapest. Pp. 239.—A philosophical, epistemological and biological foundation of a modern monistic-materialistic cognition of psychical phenomena. Cognition of our psychical processes or functions is but the specially directed logical grasping of ordinary "external" perceptions by association. We experience the psychical occurrences in the same way as the unconscious organic functions, but transform them by an immediate associative method into conscious knowledge; wherefore we have no real knowledge of the nature of the psyche. Thus psychical life or psychical functions and our conceptions about all psychological matters are derived from the mere speculations of thousands of years. It is not claimed that psychic life could not be wholly and in all its relations identical with physiological processes, i. e., the neuronc impulses of the cerebral cortex. The second part of the work shows how from the single sensations up to the most complicated systems of thought there is a

coherent and gradual evolutionary chain of associating and organizing concentrations of functions whose links are (1) sensations; (2) formations or images; (3) individual, and (4) general representations of objects; (5) ideas, i. e., representations connected with words; (6) thoughts derived from the temporal arranging of ideas; (7) principles originated by fusion and organization, or (8) systems of thought descending from association by contact; (9) emotions resulting from the relations of quantity of energy to the cortical development of intellectual processes; (10) will as the cortical representation of centrifugal motor processes and their perception with the help of kinesthetic sensations; (11) consciousness as the continual process of cenesthesia, whose fusion and concentration in a more central territory constitutes central consciousness; (12) the act of attention is motor activity connecting single occurrences with central cenesthesia, and (13) state or condition of attention is sensory, mostly kinesthetic, evaluation of this process.—P. Ranschburg (Budapest).

3610. Halasy-Nagy, J. v. *A bölcs és a tudós.* (Wisdom and science.) *Athenaeum*, 1932, 18, 5-6; 131-135.—Philosophy has a double aspect: it is practical wisdom of the world as it is, and science or pure theory of being and of value.—P. Ranschburg (Budapest).

3611. Heidbreder, E. *Seven psychologies.* New York: Century, 1933. Pp. 450. \$2.25.—After stressing the importance of systems of psychology in the stimulation of psychological thought and experimentation, the author reviews the development of pre-scientific psychology and the beginnings of experimental work. She then takes up in order the following topics: Titchener and structuralism, the psychology of William James, functionalism and the University of Chicago, behaviorism, dynamic psychology and Columbia University, Gestalt psychology, Freud and the psychoanalytic movement, and a summary. The book presents an outline of the principal American trends of psychological thinking with some emphasis upon their historical and European backgrounds. The author does not defend any one particular system, although she seems to favor a combination of dynamic and functional psychology. An attempt is made to point out the similarities and agreements between systems as well as to indicate their divergences.—W. S. Hunter (Clark).

3612. Hirschfelder, A. D., & Ridges, A. H. *Bloodless method for recording respiration and quantitative determination of sensation in small animals.* *Proc. Soc. Exper. Biol. & Med.*, 1933, 30, 958-962.—An apparatus is described for studying anesthesia, analgesia, and hyperalgesia in small laboratory animals without performing surgical operations. The threshold of sensation is taken as the minimal stimulus, furnished by induction shocks, which causes a definite change in amplitude or rate of respiration. By this method the effect of analgesic drugs has been studied quantitatively. Results with amidopyrene and acetanilid are given. A similar method and results are described briefly for determining sensitivity to pain



in man. The authors believe that their method furnishes a more delicate index than other methods for testing the onset, degree, duration, subsidence, and distribution of local and spinal anesthesia.—*P. Seckler* (Clark).

3613. **Hollander, B.** *Brain, mind, and the external signs of intelligence.* London: Allen & Unwin, 1931. Pp. 288. 12/6.—(*Biol. Abst.* VII: 3218).

3614. **Lambole, —.** *Appréciation de l'acuité auditive en un nouvel acouscope.* (Appreciation of auditory in a new acouscope.) *Paris méd.*, 1932, 22, 334-336.—A new apparatus which resembles both the acoumeter of Itard and the acouscope of Keller. It consists of the fall of a body (an ivory ball) of variable weight from a fixed height, on the membrane of a phonendoscope, with the fall upon fixed points on the radius. The tension of the membrane being supposed constant, a series of noises or sounds which can easily be graduated is obtained.—*Math. H. Piéron* (Sorbonne).

3615. **May, J. V.** *George Milton Kline. Ment. Hygiene*, 1933, 17, 294-295.—Obituary.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.).

3616. **Murphy, G.** *General psychology.* New York: Harper, 1933. Pp. 657. \$2.75.—The author begins this elementary textbook with a discussion of psychology as a science and closes it in the twenty-eighth chapter with an account of the modern "schools." The treatment, which covers practically all of the fields and topics of psychology, emphasizes experimental work. Psychology has as its subject matter "neither the world nor the organism in isolation, but the interaction of the two." The text is copiously illustrated.—*W. S. Hunter* (Clark).

3617. **Schmitz, W.** *Die Registrierung von Aktionsströmen mit dem Kathodenstrahlen-Oszillographen.* (Recording action currents with the cathode-ray oscillograph.) *Pflug. Arch. f. d. ges. Physiol.*, 1933, 232, 1-6.—*B. F. Skinner* (Harvard).

3618. **Stern, E.** *Allgemeine Psychologie.* (General psychology.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, 5, 89-96.—The author discusses the major problem of psychology, the relationship existing between psychological and physical or physiological processes. He considers in this connection the opinions of Hartmann and Wolff, and the present tendency toward physiological interpretations of psychological processes. The second part of the article is devoted to Gestalt psychology, and the work of Stern and Kretschmer on the psychology of personality.—*D. S. Oberlin* (Bryn Mawr).

3619. [Various.] **Benedek, László**—*emlékkönyv tanári működésének tizéves évfordulója alkalmából. Irták Tanítványai.* (Festschrift for László Benedek by his students in honor of the tenth anniversary of his professorship.) Debrecen: 1932. Pp. 280.—Contents: 19 communications about psychiatric problems, among them the following of psychological importance: K. Csőraz and L. v. Tokay, Hereditary behavior of deaf-

mutism. *Jolan v. Ferenczy*, Needle work of female psychotics. *J. v. Follmann*, Mental and psychical hygienic research on village schools and pupils. *Jos. Kiss*, Psychogenic and neurogenic leukorrhea. *S. Kopányi*, 10 years of statistical results of the treatment of morphinists in the psychiatric clinic at Debrecen. *St. v. Máday*, Some laws of instinctive life. *Zoltán Pap*, Psychology and psychiatry. *Jos. Salánki*, Medical testimony in witch-trials in Debrecen. *Eug. v. Thurzó*, The craniotonoscopic method of Benedek and the value of craniophony and cranial pneumophony in cases of hydrocephalus, brain tumors and cranial defects.—*P. Ranschburg* (Budapest).

3620. [Various.] *Festschrift, William Stern zum 60 Geburtstag am 29 April, 1931.* (Festschrift for William Stern, in honor of his 60th birthday, April 29, 1931.) *Beih. z. Zsch. f. angew. Psychol.*, 1931, No. 59. Pp. 264.—Thirteen individuals participate in the William Stern Festschrift. *A. Adler* discusses the nervous character from the point of view of individual psychology and the development of social attitudes in the individual. *H. Bogen* writes upon the vocational problem of the correct estimation of abilities and talents of the individual taken as a whole and presents a scheme of the various kinds of information necessary in making such an estimate. *J. Cohn* considers the opposition between the physicist's concept of the world and life as the object of knowledge. In a paper on personalism and biology, *F. Giese* traces the concept of individuality in the organic and inorganic worlds and differentiates individuality and personality. *E. Jaensch* writes upon the meaning of "Strukturtypologie" for applied psychology and psychotechnics, elaborating certain of its philosophical implications. *D. and R. Katz* report a study of words of abuse as they appear in the language of young children. *H. Klüver* discusses experiments in which monkeys are trained to react to changes in weight, or in visual or auditory characteristics of an object which the animal is pulling in toward his cage. The equivalence of various stimuli is determined by the limits of stimulus change within which the habit is maintained. *P. Kohnstamm* considers the relation between typology of persons and the *Weltanschauung* with reference to various philosophical and religious views. *O. Lipmann* defines the relations between applied psychology, psychotechnics, and the science of industry. *M. Muchow* contributes a discussion of childhood and youth from the viewpoint of typology, which emphasizes individuality as contrasted with the differential psychology which seeks general tendencies and deals with averages. *G. Révész* attempts to distinguish, in descriptive terms, between fear and anxiety, alarm, terror and shrinking. *H. Werner* applies the principle of Gestalt stratification to the field of esthetics, distinguishing between laws of surface and deep structures. *H. Wunderlich* discusses the concept of observation in investigations in applied psychology.—*H. Peak* (Yale).

3621. **White, W. A.** *Professor Freud's seventy-fifth birthday.* *Ment. Hygiene*, 1931, 15, No. 3.—*R. R. Willoughby* (Clark).

3622. Williams, D. C. On having ideas in the head. *J. Phil.*, 1932, 29, No. 23.—R. R. Willoughby (Clark).

[See also abstracts 3763, 3938, 3952, 4115.]

#### SENSATION AND PERCEPTION

3623. Akesson, S. Vergleichende Untersuchungen über die Fähigkeit eines Protanopen, einer Deuteranopen und eines normalen Trichromaten, spektrale Lichter von der Wellenlänge 740 m $\mu$  bis zur Grenze gegen Ultrarot wahrzunehmen. (Comparative investigations on the ability of a protanope, a deuteranope, and a normal trichromat to perceive spectral colors from a wave-length of 740 m $\mu$  to the infra-red limit.) *Skand. Arch. Physiol.*, 1931, 63, 1-14.—With the eyes light-adapted, the red end of the spectrum is materially shortened in protanopia, but in deuteranopia it is only slightly shorter than normal. During dark adaptation the long wave limit of the protanope is materially extended, but since there is slight change in the deuteranope the limits of the two come close together. The dark-adapted normal eye extends its long wave limit only about a third as far as a protanope. The threshold for light intensity shows that during dark adaptation the sensitivity for long light waves increases more in the protanope than in either the deuteranope or the normal. The threshold for wave lengths between 740 m $\mu$  and the longest ones visible has a color value in both types of color blindness as well as in the normal. A photochromatic interval is not present. The color perceiving apparatus adapts itself for long wave length during dark adaptation better in the protanope than in the deuteranope or normal.—(*Biol. Abst.* VII: 841).

3624. Anderson, H. C. Messungen der subjektiven Helligkeitsvermehrung während der Adaptation. (Measurements of subjective brightness increase during adaptation.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, 229, 567-577.—(*Biol. Abst.* VII: 8422).

3625. Asarkof, J. E. The pupil. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3626. Beacher, L. L. Fusional treatment with third dimension training series. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3627. Beacher, L. L. Heredity of color blindness. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3628. Beacher, L. L. Possibilities of glare reducing visual acuity. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3629. Blount, W. P. Pain. *Vet. J.* (London), 1931, 87, 512-517.—(*Biol. Abst.* VI: 18592).

3630. Bognár, C. Tézsemlélet. (Perception of space.) *Athenaeum*, 1932, 18, 136-152.—The author has observed during his flying in an aeroplane the lawfulness of psychic images in open space. This psychical space compared with our knowledge of the real material order is deformed, i.e., simplified, according to certain fundamental geometrical forms. The simplification is greater with adults, less with

children. In certain individuals the psychic space compared to the real one is displaced by 90°.—P. Ranschburg (Budapest).

3631. Bretas, A. Psychologia das sensações. (The psychology of the sensations.) Rio de Janeiro: Lab. de Psychol. na Colonia da Psychopathas, 1931. Pp. 104.—R. R. Willoughby (Clark).

3632. Duane, A. Accommodation. *Arch. Ophth.*, 1931, 5, 1-14.—(*Biol. Abst.* VII: 3164).

3633. Feinbloom, W. Contact lenses. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3634. Fischer, A. Experimentelle Beiträge zur räumlichen Orientierung. (Experimental contributions to the problem of spatial orientation.) Frankfurt a/M: 1931. Pp. 50.—Does one's visual image of a total area (e.g. a room) determine the direction of one's orientation? The perception of vertical contours varies according to the location which they occupy in the image one had of the entire region. Intentional rotation of the total image resulted in both darkness and light in a corresponding change of position by an objectively fixed vertical. This occurred when the vertical object was seen as part of the total area; when seen as an independent object it did not move with but rather against the rotation of the total region. These observations were all made under the conditions of a conscious awareness of the total image. Using a homogeneous screen, the subjects were asked to imagine a rotation of the total area and to indicate the place which a vertical line would then occupy. Their results differed with an objective vertical, but usually in the opposite direction from that of the imagined rotation. Several other experiments of a similar character are reported.—A. Fischer (Frankfurt a/M).

3635. Fording, H. L. An historical thesis on the science of vision. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3636. Greene, E. B. Effect of background on visual acuity of circle grids. *J. Exper. Psychol.*, 1932, 15, 583-590.—The effect of the immediate background upon visual acuity was measured when the test object was held constant. Four different backgrounds, of white, light gray, dark gray, and black were used. The test objects consisted of circles with grids of black parallel lines printed on dull-finish white photographic paper. The background had its minimum contrast effect in the case of the light gray, and its maximum in the case of the white. All of the six subjects preferred one of the grays to either black or white backgrounds. For four of the subjects the light gray background was better. The dark gray background made resolution easier for two of the subjects.—S. Renshaw (Ohio State).

3637. Grijns, G., & de Haan, K. Over nabeeelden en contrast in gekleurd licht. (On after-images and contrast in colored light.) *K. Akad. Wetenschap. Amsterdam, Verslag Gewone Vergader. Aft. Naturk.*, 1926, 35, 528-535.—Appeared also in English in *K. Akad. Wetenschap. Amsterdam, Proc. Sect. Sci.*, 1926, 29, 878-884.—(*Biol. Abst.* VII: 3169).



3638. Guillaín, G., & Bize, P. R. *Astérognosie bilatérale, symétrique, progressive et autonome.* (Bilateral, symmetrical, progressive and autonomous astereognosia.) *Rev. neur.*, 1932, 39 (II), 969-977.—Case of a patient suffering from an affection characterized by a bilateral astereognosia, developing progressively, and seeming to depend upon progressive and symmetric atrophic lesions of the parietal region. This patient presents: (1) Disorders of sensibility and tactile identification, which consist first in a dulling without anesthesia of the sense of touch, and temperature, and pressure, then in a relative conservation of the sense of attitude and spatial orientation, then an anesthesia for pain, weight, pitch, and articular sensation, and finally, impossibility of elementary and synthetic identification. (2) Disorders of olfactory perception. (3) Normal reflexes. (4) Absolute integrity of speech, movement, and even the intellectual functions. (5) No behavior disorders.—*Math. H. Piéron* (Sorbonne).

3639. Hafter, E. *Untersuchungen über den Mechanismus der retinalen Umstimmung.* (Studies on the mechanism of retinal conversion.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, 229, 447-465.—(*Biol. Abst.* VII: 8428).

3640. Hecht, S. *Entgegnung an Best.* (A reply to Best.) *Naturwiss.*, 1930, 18, 237-239.—Increase in visual acuity through artificial lighting cannot be attributed to an amelioration of contrasts. It cannot be of a physical nature, and on the other hand the eye perceives only relative differences of the luminous intensity, the latter remaining the same whatever the lighting intensity. Hecht finds nothing unlikely in the great difference between individual thresholds, as each statistical distribution presents a few extreme variants. By parallelism between sensation of luminosity and visual acuity, the author means that statistical distribution of the thresholds of the cones and rods attests to the variations of the differential threshold for luminous intensity. Lastly, Adrian's works show that the "all-or-nothing" law is applicable to the fibers of the optic nerve. Hecht concludes with a reference to a recent work on the eyes of insects, which confirms his theory.—(*Biol. Abst.* VII: 853).

3641. Horton, H. S. *The diagnosis and correction of functional myopia.* *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3642. Jaensch, E. R. *Über Schichtenstruktur und Entwicklungsgeschichte der psychophysischen Organisation.* II Teil. *Empfindungs- und Wahrnehmungsuntersuchungen.* V. Puhl, E. *Die individuellen Differenz des Farbensinnes in ihrer Beziehung zur Gesamtpersönlichkeit.* (Concerning the structural arrangement and ontogeny of the psychophysical organization. Part II. Investigations of sensation and perception. V. Individual differences in color sense and their relation to the total personality.) *Zsch. f. Sinnesphysiol.*, 1932, 63, 1-37.—This investigation was carried out as a part of the program of the Marburg Psychological Institute concerning the theory of types. The author reports

experiments dealing with the relations between the totalized and disintegrated types and individual differences in color sensitivity. In the principal experiments the subjects were required to match a gray with mixtures of yellow-blue and red-green. 250 subjects were used, ranging in age from 6 to 50 years. Differences among the subjects were obtained ranging from 150°-210° blue-yellow (reported equal to a gray composed of 145° white and 215° black) to 183° yellow 177° blue reported equal to the same gray. Similar results were obtained in red-green mixture. Under varying conditions which included physical and mental fatigue, irradiation with light from mercury quartz lamps and sunlight, and comparison of ages, the author reports that the integrated types show a relatively higher sensitivity for the longer-waved light rays, which increases upon irradiation and decreases under conditions of bodily and mental fatigue. As new criteria of the integrated type the author reports characteristics of the pigmentation of the skin and hair. Fifteen tables accompany the article and one chapter deals with criteria for determining types.—M. G. Preston (Pennsylvania).

3643. Jenkins, J. G. Dr. Metzger on "Gestalt und Kontrast." *J. Exper. Psychol.*, 1933, 16, 175-176.—Further clarification of issues involved in Metzger's comments on Benary's experiments on Wertheimer's cross-triangle designs, by Jenkins.—S. Renshaw (Ohio State).

3644. Kaye, G. W. C. *Noise and its measurement.* *Nature*, 1931, 128, 253-264.—(*Biol. Abst.* VII: 3175).

3645. Kenneth, J. H. *A psycho-physiological interpretation of the 'aura.'* *Brit. J. Med. Psychol.*, 1932, 12, 343-345.—The explanation of the aura as due to negative after-images is only partially satisfactory. While the visual aura is subjective, the existence of an objective aura of a chemical and electrical character is an undeniable fact. Smell-color synesthesias afford a rational and psycho-physiological interpretation of the phenomenon in cases where the negative after-image is not the fitting or sole explanation.—E. R. Hilgard (Yale).

3646. Koch, C. C. *Orthoptic treatment work.* *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3647. Koch, C. C. *Syndromes of ocular neuromuscular defect.* *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3648. Koch, C. C. *The cyclodamic method of estimating the total error of ocular refraction.* *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).

3649. Kreiker, A. *Gesichtswinkelgesetz und die Aubert-Förstersche Erscheinung.* (Laws of the visual angle and the Aubert-Förster phenomenon.) *Zsch. f. Sinnesphysiol.*, 1932, 63, 87-92.—Comment on the investigation of F. Mayer-Hillebrand, *Über die scheinbare Entfernung oder Sehtiefe*, *Zsch. f. Sinnesphysiol.*, 1932, 63, 38-86. The Aubert-Förster phenomenon and the relationships discussed by Hillebrand appear to be closely related. Kreiker distinguishes perceptual and memorial characteristics in the A-F phenomenon from the phenomenal

characteristics of the Hillebrand data.—*M. G. Preston* (Pennsylvania).

3650. Kurtz, J. I. Psychological and physiological factors in ocular fatigue. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3651. Kurtz, J. I. Pupillary reaction an important factor in making a diagnosis. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3652. Kurtz, J. I. The treatment of ocular fatigue. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3653. Le Grand, Y. Convergence et sens du relief. (Convergence and the sense of relief.) *Rev. d'optique théorique*, 1932, 11.—The author studies the important role of variations of convergence in stereoscopic vision; their acuity reaches 18" and does not depend upon the absolute value of the convergence. As for the perception of depth by binocular parallaxes, it is not only qualitative but also permits the estimation of the value of differences in depth, with a threshold of about 5". These two mechanisms are interchangeable, then, at least for weak reliefs; one is used by preference for neighboring points, and the other for points further removed in separation and in depth.—*Math. H. Piéron* (Sorbonne).

3654. Leriche, R. Les douleurs des moignons d'amputation. (The pain of stumps left by amputation.) *Presse méd.*, 1932, 40, 869-873.—A patient who has had an amputation continues to suffer pain in the member which has been removed; this is called the illusion of the amputated. In this case imagination and psychology too often are said to play a part. However, the author states that there is actually no psychic phenomenon and no sensory hallucination. There is a simple physiological phenomenon of latent excitation of the centripetal cylindraxes which formerly went to the periphery. If the higher parts of the centripetal conductors of the nerves which were cut, but which continue to be able to receive excitations, receive them, they conduct them to the same place as formerly, and there elaborate the same translation of the excitation as before; this explains why the person whose member has been amputated always feels the absent member.—*Math. H. Piéron* (Sorbonne).

3655. Lissner, H. Ueber unseren Glauben an die Realität einer Aussenwelt. (Concerning our belief in the reality of an external world.) *Zsch. f. Psychol.*, 1933, 128, 111-202.—This constitutes a psychological analysis of the sources of our belief in an external world, rather than an epistemological proof of its existence. Part I deals with the sensory bases of the reality experience. Self-reality is found to depend on the sense of pain, and external reality to depend on the experience of resistance evoked by pressure stimulation. Part II deals with the expressive character of the external world. The traditional mediational theories, inference by analogy and empathy, and the more recent "perceptual" theory (Scheler, Cassirer and others), based on the assumption of an immediate apprehension of affective expression, are

examined, and each is accorded a certain justification.—*R. B. MacLeod* (Cornell).

3656. Littlefield, R. E. Orthoptics. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3657. Mayer-Hillebrand, F. Über die scheinbare Entfernung oder Sehtiefe. (Concerning apparent distance or visual depth.) *Zsch. f. Sinnesphysiol.*, 1932, 63, 38-86.—The perception of depth is primarily carried out through disparateness; the horizontal disparateness within corresponding sensory circles acts immediately as the stimulus; combinations of excitation released on this account generate the perception of depth. Perception of depth does not depend on this alone, however, because to equal amounts of horizontal disparateness there do not correspond equal visual depths. The relation between the value of stimulus of the visual angle to the limits of distinctness and the value of stimulus of the angle of horizontal disparateness to the location in depth must remain equal if the impression of equal distances of depth is to be obtained. Increasing narrowing of the visual field with increasing distance is explained by a changing distribution of impulses from the vegetative nervous system.—*M. G. Preston* (Pennsylvania).

3658. Mayer-Hillebrand, F. Über die scheinbare Grösse der Sehdinge. (The apparent size of visual objects.) *Zsch. f. Sinnesphysiol.*, 1931, 61, 267-324.—A review of the literature on apparent size and the conflicting physical, physiological, and psychological explanations of the phenomena shows that none of the theories so far proposed is completely satisfactory. Results are presented from a carefully controlled experiment in which the visual angles intercepted by equal-appearing horizontal stretches at various distances from the subject are compared with the visual angles intercepted by corresponding stretches between the limits of distinct vision at the same distances. The author concludes that objects at different distances appear equally large if the relation between the excitation-magnitudes (*Erregungsgrössen*—values taking into account the distance of the retinal image from the fovea) of their visual angles and those of the visual angles of the corresponding limits of distinctness remains constant. This law explains constancy of size, the Marzynski and Aubert-Foerster phenomena, and the results of Frank, Freeman, and others. Analysis of the variation of the limits of distinctness leads to the conclusion that they depend upon the retinal areas involved in changes of binocular parallax.—*F. W. Irwin* (Pennsylvania).

3659. McFadden, F. Bifocal for juvenile myopic patients. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3660. Mira, E. Assaig psicológic sobre el dolor. (A psychological essay on pain.) *Rev. de psicol. i ped.*, 1933, 1, 2-21.—Mira discusses the psychophysiological concept of pain, the conditions determining suffering, and the principles of its alleviation. Physical pain arises externally to the conscious ego, while psychic pain originates in the ego and involves the totality of consciousness. Suffering is the end product of pain, and is based on the individual's con-



ception of his subjective future, which he considers as a mental present. The basic psychotherapeutic principles of combating suffering are to make the individual's subjective future pleasant by providing for the basic needs of the ego, and to convince him that his suffering will turn into ulterior satisfaction. Whatever decreases motor reactions and increases the intensity of sensory impressions augments the capacity for suffering. Hence the best defense against suffering is action. There are two ways of dominating suffering: the magical (religious) or contemplative, leading to resignation, stoicism, or identification with a higher power; and the realistic, leading to extroversion, an aggressive attitude, and relief from repressions. An exteriorized attitude is favored by stimulating the aggressive tendencies. Phylogenetically and ontogenetically, the most primitive emotional reaction to danger is immobility (panic, terror). This is followed by the extensive reaction (anger), affirmation of the individual, and domination of the situation. When the internal problem of the individual's own existence is solved, the social, integrating reaction (love) appears. Suffering is not an inevitable phenomenon, but a biological imperfection, the consequence of a law of evolution in virtue of which the capacity for sensitiveness exceeds for a long period that of adequate reaction. Every new adaptation involves a "potential of suffering." When the individual affirms his own reaction of omnipotence—actual or imaginary—he ceases to suffer.—*M. E. Morse* (Catonsville, Md.)

3661. Moore, R. M., & Moore, R. E. Studies on the pain-sensibility of arteries. I. Some observations on the pain-sensibility of arteries. *Amer. J. Physiol.*, 1933, 104, 259-266.—In animals under anesthesia the stimulation of afferent neurones subserving pain sensibility results in reflex motor activity of a pseudo-affective nature. When an irritant is injected into an artery there results a strong reflex response which is characterized by movements of the extremities, dilatation of the pupils, changes in the pulse and respiration, and accompanying vocalization. This form of pain sensibility is more acute in arteries of the extremities, but is present also in arteries to visceral organs. The pain occurs independent of stretching and of spasm of arterial muscle. It is believed that manipulation of arteries gives rise to pain only as a result of trauma to the accompanying gross nerve trunks. It is concluded that there is a numerous group of afferent neurones subserving painful sensation which end in close association with the smaller arterial branchings.—*C. Landis* (N. Y. Psychiatric Institute).

3662. Moore, R. M., & Singleton, A. O., Jr. Studies on the pain-sensibility of arteries. II. Peripheral paths of afferent neurones from the arteries of the extremities and of the abdominal viscera. *Amer. J. Physiol.*, 1933, 104, 267-275.—The injection of an irritating solution into an artery results in stimulation of afferent fibers which subserve arterial pain sensibility. In amyotized animals this results in characteristic reflex motor activities of a quasi-emotional nature. The peripheral anatomical paths

which these fibers follow have been traced in experiments determining the presence or absence of this reflex reaction after the section of one or another peripheral nerve. Experiments are reported which illustrate the importance of the sensory fibers contained in the sympathetic and splanchnic trunks as regards the pain sensibility of abdominal organs. Afferent fibers contained in the vagal cords and in the phrenic nerves subserve varied and important functions, but seldom conduct impulses which give rise to painful sensation. The sympathetic trunks and their splanchnic branches are the true pain nerves of the abdomen.—*C. Landis* (N. Y. Psychiatric Institute).

3663. Murr, E. Physiologische Untersuchungen über die sogenannten leuchtenden Augen bei den Wirbeltieren. I. Die Lichterregbarkeit der Hauskatze beim Dämmerungssehen. (Physiological investigations on the so-called glowing eye in vertebrates. I. The light sensitivity of the house cat in twilight vision.) *Zool. Jahrb., Abt. Allg. Zool. u. Physiol. Tiere*, 1931, 49, 509-632.—(*Biol. Abst.* VII: 3179).

3664. Nowikoff, M. Das Modell des Rhabdoms von Komplexaugen. (The model of the rhabdome in compound eyes.) *Biol. Zent.*, 1931, 51, 325-329.—(*Biol. Abst.* VII: 3180).

3665. Oblath, O. Colour vision tests. *Int. Labour Office Studies & Repts. Ser. F. (Indus. Hyg.)*, 1929, 12, Pp. 47. \$0.50.—(*Biol. Abst.* VII: 3181).

3666. Ocshier, M. M. Color field work. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3667. Oertel, G. The correction of squint on the dominant side. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3668. Pascal, J. I. Neutralization in dynamic skiametry. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3669. Pascal, J. I. Simplifying calculations for dioptric power. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3670. Peckham, R. M. Notes on myopia. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3671. Pfluck, A. v. Neue Wege zur Erforschung der Lehre von der Akkommodation. (New methods of investigation in the doctrine of accommodation.) *Graefes Arch. f. Ophth.*, 1932, 128, 179-200.—(*Biol. Abst.* VII: 3183).

3672. Piéron, H. L'intégration des "neuroquanta" et la relation des échelons de sensation avec les intensités des stimuli. (The integration of the "neuroquanta" and the relation of the gradations of sensation to the intensity of the stimuli.) *C. r. Soc. biol.*, 1932, 111, 626-628.—When the intensity of a stimulus engendering a sensation is regularly increased, beginning at the threshold, it produces discontinuous increases of perceived intensity; each time the augmentation of intensity of the stimulus attains a certain value (differential threshold) there is a passage from one grade of sensation to the next. This passage carries the possibility of a qualitative change, of a substitution of reaction or of suppression, or yet of

the initiation of a new reaction (conventional reaction in experiments on man, natural reaction in the reversing of tropisms, acquired reaction in the conditioning method). It is then necessary to admit that the quantitative modification supervening in the afferent influxes can lead to modifications in the reactional circuits. The author thinks that a new neuron intervenes at each new grade of sensation, leading back to the cortical level the process of addition which was thought to be localized at the peripheral level before Adrian showed that the increase in intensity of stimulation transformed itself by an augmentation of the frequency of the afferent influxes in the sensory neuron involved. This neuron responds to stimulation by series of its impulses, which constitute true "neuroquanta" of duration and constant amplitude in a continuous stimulation. At the threshold, the integration of two neuroquanta is sufficient to release the response of a cortical sensory neuron. New grades of sensation will be attained as long as the integration of the neuroquanta in a new neuron is sufficient to put it in action. The sensation will not attain its terminal level except by passing through a series of successive grades in the course of the initial phase of action of the stimulus (establishment).—*Math. H. Piéron* (Sorbonne).

3673. Piéron, H. L'interprétation des retards réductibles de latence sensorielle en fonction des intensités pour les stimulations brèves. (The interpretation of reducible delays of sensory latency as a function of intensities for brief stimulations.) *C. r. Soc. biol.*, 1932, 111, 587-588.—The author has shown before that in an analysis of the time of sensory latency, if one practically eliminates the rôle of action time, using a brief light stimulus, a reducible margin of latencies persists, manifesting a hyperbolic decrease when the level of energy of the stimulus is raised. He has attributed this margin to a reducible delay in the breaking through of the synapses of the sensory afferent pathway. Actually, thanks to the facts acquired on the afferent impulse, he is led to think that the perceptive reaction which gives birth to the felt sensation implies also an iterative system, and that two impulses, at least, are necessary to attain the sensory threshold. The existence of an iterative system in the sensory afferent phase seems extremely probable. Instead of speaking of reducible latency in the breaking through of synapses in general, this reducible latency is no longer envisaged except as in the breaking through of the synapse corresponding to a reflex neuron releasing a definite motor or glandular reaction to the infra-cortical levels.—*Math. H. Piéron* (Sorbonne).

3674. Pohlman, A. G. The interpretation of conduction deafness. Report of two unusual cases. *Arch. Otolaryngol.*, 1931, 14, 48-63.—(*Biol. Abst.* VII: 859).

3675. Pollard, W., & Bloomfield, A. Experimental referred pain from the gastrointestinal tract. I. The esophagus. II. Stomach, duodenum and colon. *J. Clin. Investigation*, 1931, 10, 435-452; 453-473.—(*Biol. Abst.* VI: 18646).

3676. Rinde, C. A. Chromatic sensations from field-size measurements at varying wave length, *J. Exper. Psychol.*, 1932, 15, 574-584.—Retinal areas sensitive to various chromatic stimuli were measured by selecting a band of the spectrum which was allowed to fall upon a translucent glass disk. The eye of the subject remained fixated and field size was measured by calculating the angle to the right or left of the fixation point as the translucent glass was moved steadily into the field of view. Variation of field size was measured in relation to wave length. The curves obtained can be reconciled with the notion of four stimuli producing invariable hues, from the center to the periphery of the retina. In general, homogeneous light does not produce simple sensations. The chromatic sensation produced by the violet end of the spectrum is a compound of blue, either with red or with an additional short wave length sensation. The complementary canceling effect of blue and yellow sensations produced by a homogeneous stimulus has been found in the range 480-495 mμ. The limits and sensitivity ranges vary widely with stimulus intensity.—*S. Renshaw* (Ohio State).

3677. Schroeder, A. Die Mängel in der Wahrnehmungswelt des sechswachen Kindes und Versuche zu ihrer Beseitigung. (Deficiencies in the perceptual world of children with weak eyes and attempts to overcome this.) *Hilfsschule*, 1932, 25, 466-477.—Visual perception involves three components: the physical stimulus, physiological processes, and psychological activity. Physiological disturbances, reducing the stimulating effect, diminish or pervert perception. It has been shown that there is a considerable discrepancy between an exact recognition and a mere seeing of *something* about the thing one looks at. The rôle of fantasy in the latter instance is extremely important, and it is this aspect of the problem which the author attacks.—*W. Nolte* (Berlin).

3678. Seitzer, A. Über das Auftreten von Veränderungen am Augenhintergrund bei den verschiedenen Brechzuständen des Auges. (The incidence of changes in the ocular background in the different pathological conditions of the eye.) Universität Tübingen, dissertation, 1930. Pp. 16.—(*Biol. Abst.* VII: 8433).

3679. Snow, W. B. Audible frequency ranges of music, speech and noise. *Bell System Tech. J.*, 1931, 10, 616-627.—(*Biol. Abst.* VII: 3185).

3680. Steinhausen, W. Über die Eigenbewegung der Cupula in den Bogengangampullen des Labyrinths. (The self-movement of the cupula in the ampullae of the semi-circular canals of the labyrinth.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, 229, 439-440.—(*Biol. Abst.* VII: 3186).

3681. Tschermak, A., & Schubert, G. Über Vertikalorientierung im Rotatorium und im Flugzeuge. (Vertical orientation in the rotating apparatus and in aviation.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 228, 234-257.—(*Biol. Abst.* VI: 18607).

3682. Verrier, M. L. Physiologie comparée des cônes et des bâtonnets. Indications fournies par



**l'étude du comportement.** (Comparative physiology of the cones and the rods. Indications furnished by the study of behavior.) *C. r. Acad. Sci.*, 1932, 195, 1333-1335.—Following current opinion, the cones would be the organs of vision in strongly lighted places, and of color vision; the rods, on the contrary, would be the organs of vision in a diffuse light. The author, after having studied a great number of retinas in the vertebrate series, and having at the same time studied the behavior of each individual, declares that the relationship which investigators have tried to establish between the form of the visual cells and the habitat, or the mode of diurnal or nocturnal activity, does not exist. One cannot establish a relationship between the forms of the visual cells and the behavior which permits the establishment of the role of the cones and the rods.—*Math. H. Piéron* (Sorbonne).

3683. Weber, A. O. Estimation of time. *Psychol. Bull.*, 1933, 30, 233-252.—A review of 49 titles, including some on the philosophical nature of time; on the relationship of space and time in experience; on the genetic development of the time concept; and on experimental studies of time estimation as affected by interpolated activities, by limiting stimuli, by organic and kinesthetic conditions, and by other factors. Many of the most promising aspects of the problem have only been touched upon as yet.—*J. F. Dashiell* (North Carolina).

3684. Wohlfahrt, E. Gestalt und Sinn. II. Der Auffassungsvorgang an kleinen Gestalten. (Gestalt and meaning. II. The apprehension of small figures.) *Neue psychol. Stud.*, 1932, 4, 319-414.—Geometrical figures and patterns were presented in various sizes for visual recognition. The degree of difficulty in seeing and describing the figures was found to vary not only with size but also with location and value. The first stage in recognition is of symmetry and homogeneity. These early aspects are designated "pre-Gestalt" stages and their most pronounced characteristics are found to be those of development and inadequacy. As the figure is more clearly seen, these processes yield the completed Gestalt itself.—*H. Burkhardt* (Leipzig).

3685. Young, J. Z. Comparative studies on the physiology of the iris. I. Selachians. *Proc. Roy. Soc. London*, 112B, 228-241.—*F. C. Bartlett* (Cambridge, England).

3686. Young, J. Z. Comparative studies in the physiology of the iris. II. *Uranoscopus* and *Lophius*. *Proc. Roy. Soc. London*, 112B, 242-249.—*F. C. Bartlett* (Cambridge, England).

3687. Yourievitch, S. Valeur des mouvements oculaires dans l'émotion esthétique. (The amount of ocular movement in esthetic emotion.) *C. r. Acad. Sci.*, 1932, 194, 1189-1190.—(*Biol. Abst.* VII: 8435).

3688. Ziegler, V. Visual sensitivity in the optic disk. *Univ. Pitt. Bull.*, 1933, 29, 463-464.—Pairs of forms and colors were presented simultaneously, one within each blind spot, for an interval of .3 second, the subject being required to name the form or color. The combinations of stimuli were arranged

according to a chance order and the subject possessed no knowledge of their nature. The forms were: triangle, diamond, square, rectangle, circle, and hexagon. The colors were red, yellow, blue, and green. None of the subjects was able to report the nature of the forms. All forms appeared as a flash of light with a bright core. The discrimination of color was a function of the size and intensity of the stimulus. Stimuli which could not be seen in the blind spot were perfectly evident just outside it. Colors or forms presented in a single blind spot were not discriminated as two. The results do not support Helson's theory of sensitive organs within the optic disk.—*N. L. Munn* (Pittsburgh).

[See also abstracts 3608, 3614, 3691, 3778, 3782, 3791, 3792, 3795, 3798, 3799, 3807.]

## FEELING AND EMOTION

3689. Campos, N. *Psychologia da vida affectiva*. (The psychology of the affective life.) Rio de Janeiro: Lab. de Psychol. na Colonia de Psychopathas, 1931. Pp. 113.—*R. R. Willoughby* (Clark).

3690. Wang, G. Galvanic skin reflex and the measurement of emotions. A lecture given at the Medical School of the Sun Yatsen University, March 7, 1930. Canton: Sun Yatsen Univ. Press, 1930. Pp. 28.—(*Biol. Abst.* VI: 18657).

[See also abstracts 3703, 3729, 4056.]

## ATTENTION, MEMORY AND THOUGHT

3691. Bartlett, F. C. *Remembering: a study in experimental and social psychology*. New York: Macmillan, 1932. Pp. 317. \$5.00.—After an initial consideration of psychological experimentation, the author describes a long series of experiments in the fields of perception, imagination, and remembering, using material which approximated that found in everyday life. The work on perceiving utilized chiefly geometrical diagrams; and that on imagination, ink-blots. The results in these two cases revealed the influence of the subjects' attitudes and indicated their tendency to introduce previously learned material. In the experiments on remembering two methods were used, one the method of repeated reproduction by a given subject and the other the method of serial reproduction where the material reproduced by one subject became the learning material for a second subject whose recall constituted the learning material for a third subject, etc. This latter series of experiments showed that proper names and titles are very unstable in recall, that there is a bias toward the concrete, that individualizing aspects of the material (stories) tend to be lost, and that abbreviations and rationalizations occur. Throughout the book emphasis is placed on the social determinants of the manner and matter of recall, a point of view which is supported in the anthropological material cited: "Remembering is not the re-excitation of innumerable fixed, lifeless and fragmentary traces. It is an imaginative reconstruction, or construction, built out of the relation of our attitude towards a whole active

mass of organized past reactions or experience, and to a little outstanding detail which commonly appears in image or in language form."—*W. S. Hunter* (Clark).

3692. Baudouin, C. *L'imagination plus créatrice qu'on ne le pense.* (The imagination which is more creative than one thinks.) *Psychol. et vie*, 1932, No. 12, 297-298.—The imagination is essentially creative, and it is arbitrary to distinguish a particular kind to which this adjective may be applied. All imagination is creative, and deserves to be cultivated.—*Math. H. Piéron* (Sorbonne).

3693. Van Buskirk, W. L. An experimental study of vividness in learning and retention. *J. Exper. Psychol.*, 1932, 15, 563-573.—102 subjects were presented nonsense syllables some of which were more vivid than others. Vividness was produced by increase in the size of letters and by placing red syllables on a green background. The economy in learning effected by vividness is greater than has heretofore been shown. The effect of vividness in learning tends to persist with the passage of time. That which is difficult to learn shows relative gain over that which is easily learned.—*S. Renshaw* (Ohio State).

3694. Crosland, H. R. A technique to control, and to measure the effects of, fixation in the 'range of attention' experiment. *J. Exper. Psychol.*, 1933, 16, 446-450.—A description of a new procedure to be used in investigations employing tachistoscopic exposures. The technique controls fixation and measures the effects of fixation wherever the latter happens to be directed. Evidence in support of these claims is presented in various periodicals.—*H. W. Karn* (Clark).

3695. Da Rocha, U. *Psychologia da atencao.* (The psychology of attention.) Rio de Janeiro: Lab. de Psychol. na Colonia de Psychopaths, 1931. Pp. 94.—*A. B. Hunter* (Clark).

3696. Dwelshauvers, G. Comment utiliser nos images mentales. (How to use our mental images.) *Psychol. et vie*, 1932, No. 12, 310-312.—What are the various meanings to be given the word *image*? In the first place, it means to think in images, then to create a schema, a schematic image; it is to add conscious intuition to the demonstration, to show oneself the essential thing with exactness; and then to imagine means to invent, and finally it means to give free rein to fantasy. These free images come to the aid of those who must have rapid ideation; act and respond quickly; suddenly face an unexpected situation; but these images must be disciplined because if they appear when we no longer have need of them, they become an obsession, and the mental image dominates instead of obeying.—*Math. H. Piéron* (Sorbonne).

3697. Gulliksen, H. Transfer of response in human subjects. *J. Exper. Psychol.*, 1932, 15, 496-516.—Some of the differentiating principles in accordance with which the new stimuli will or will not call out the old response were observed. Two groups of human subjects reacted to stimulus figures, which consisted of two lines joined at their ends, drawn in

black ink on cards, and which differed in size and degree of the angle. There is transfer on the basis of size of the angle when the S has been trained to make a size discrimination, and on the basis of direction of angle when S has been trained to discriminate direction of angle. There are varying degrees of ambiguity of transfer. The general similarity of the figure on the card in the test series to the figures used in the training series was found to be an adequate explanation of the results. The test stimuli used cannot be divided into two classes, equivalent and non-equivalent; the data must be treated in terms of resemblance.—*S. Renshaw* (Ohio State).

3698. Mareschal, P. La valeur du témoignage chez le normal, l'enfant et le psychopathe. (The value of evidence in the normal, the child, and the psychopath.) *Prophyl. ment.*, 1932, 6, 471-476.—Care is necessary in collecting the evidence of normal individuals, and one must always suspect the evidence of children. As for psychopaths, their evidence is not much inferior to that of normal individuals, and is deficient rather through poverty than inaccuracy of recounting, so that the evidence of an insane person is often insufficient, but rarely dangerous.—*Math. H. Piéron* (Sorbonne).

3699. Mitchell, M. B. The alleged warming-up effect in memorization. *J. Exper. Psychol.*, 1933, 16, 138-143.—16 subjects learned lists of ten three-place numbers exposed for two seconds. The subjects learned two different lists of comparable difficulty by the anticipation method. Trials were given daily. No reliable quantitative differences were found between the number of trials and errors in learning the two lists consecutively. There is some tendency to give more zero digit responses (lack of response) in the learning of the second list. There were a smaller number of correct responses made in the second, third, and fourth trials in the learning of the second list as compared with the learning of the first.—*S. Renshaw* (Ohio State).

3700. Montmasson, J. M. Le rôle du subconscient dans le travail imaginatif. (The rôle of the subconscious in imaginative work.) *Psychol. et vie*, 1932, No. 12, 299-300.—Almost wholly absent from the studies which prepare for invention, the subconscious is truly the power of the anterior psychic states which elaborate imaginative creation. Since this depends essentially upon the affective state which put it in motion, the native or acquired diversity of the sensibilities explains also the variety of imaginative types, and the personal mark of genius.—*Math. H. Piéron* (Sorbonne).

3701. Ribaskog, B. Experimentelle Untersuchungen über die für den Unterrichtserfolg günstigste Repetitionszeit. (Experimental investigations of the time of repetition most favorable for success in teaching.) *Zsch. f. angew. Psychol.*, 1932, 43, 301-347.—The author used 341 sixth and seventh grade pupils for his experiment, which consisted in varying the time interval between the first presentation and the review of certain types of material and testing its retention at a fixed time after the review. He con-



cludes that the length of the interval between presentation and review has a definite influence upon retention and that there are different optimum intervals for different types of material.—*K. F. Muenzinger* (Colorado).

3702. Schmidt, F. A szellemi munka lélektanáról. (Psychology of mental work.) *Szülök lapja*, 1932, 11, —(1) Psychic energy. (2) Examination of mental work. (3) Nature of mental work. (4) Mental and physical work. (5) Mental work and rest (recreation). (6) Sleep. (7) Practical educational results.—*P. Ranschburg* (Budapest).

3703. Stagner, R. Factors influencing the memory value of words in a series. *J. Exper. Psychol.*, 1933, 16, 129-137.—Each of the 200 subjects rated his own list of words as to feeling tone. Each word occupied every position in the list an equal number of times, so that the memory value of the specific word was separated from the memory value of position. A significant difference favoring the retention of pleasant over unpleasant words in immediate memory is found when the results are pooled. The frequency of usage of a word does not seem important in determining its memory value. Galvanic deflection produced by oral presentation of a word is not related to memory value. Shorter words are recalled better than long ones. Primacy and recency possess memory value. Primacy is of more value than recency.—*S. Renshaw* (Ohio State).

[See also abstracts 3757, 4078, 4114, 4197.]

#### NERVOUS SYSTEM

3704. Babkin, B. P. Materiali k teorii innervatsii slyunnikh zhelez. (Theory of innervation of the salivary glands.) *Russkii fiziol. zh. Sechenova*, 1930, 13, 5-10.—(German summary.)—(*Biol. Abst. VII*: 3193).

3705. Baranov, V. T. Mekhanicheskii parabioz i usloviya ego vosstanovleniya postoyannim tokom na izolirovannom nerve "in situ." (Mechanical parabiosis and its restoration by direct current on the isolated nerve and on the nerve in situ.) *Russkii fiziol. zh. Sechenova*, 1931, 14, 290-300.—(With German summary.)—(*Biol. Abst. VII*: 3196).

3706. Dandy, W. E. Certain functions of the roots and ganglia of the cranial sensory nerves. *Arch. Neur. u. Psychiat.*, 1932, 27, 22-29.—(*Biol. Abst. VII*: 3204).

3707. Delmas-Marsalet, —. Etude sur le lobe frontal et les voies centrales de l'équilibre. (Study of the frontal lobe and the central paths of equilibrium.) *Rev. neur.*, 1932, 39 (II), 618-651.—Bruns has pointed out particular disorders recalling those of the cerebellar syndrome in certain lesions of the frontal lobe. These disorders were inconstant. The author again takes up the question, and after numerous experimental, anatomical and clinical researches, he concludes that the participation of the frontal lobe in the function of equilibrium cannot be denied, because of the cerebellar and labyrinthine impulses which it normally receives, and which it reflects in

coordinated form by the fronto-ponto-cerebellar path, and another mixed path to the pyramidal path. One would be wrong, according to the author, not to see the consequence of heightened mentality in the enormous development of the frontal lobe in man. This development must pertain also to the perfection of human equilibrium, in particular in the upright position. Bibliography of 52 titles.—*Math. H. Piéron* (Sorbonne).

3708. Eichler, W. Über die Abhängigkeit der Chronaxie des Nerven vom äusseren Widerstande. (The dependence of the chronaxy of nerve upon the external resistance.) *Zsch. f. Biol.*, 1931, 91, 475-490.—(*Biol. Abst. VII*: 3208).

3709. Fredericq, H. La métachronose (ou changement de chronaxie) des viscères, produite par l'excitation des nerfs de la vie végétative. (Metachronosis or change of chronaxy of the viscera, produced by the excitation of the vegetative nervous system.) *Bull. Acad. Roy. Méd. Belgique*, 1931, 11, 272-299.—(*Biol. Abst. VII*: 874).

3710. Fridman, A. A. K voprosu o vliyanií simpaticheskoi sistemy na poperechnopolosatuyu muskulaturu. (Effect of the sympathetic nervous system on striated musculature.) *Russkii fiziol. zh. Sechenova*, 1931, 14, 242-248.—102 experiments were performed on decerebrated autumn *Rana esculenta*. The anterior roots were stimulated until fatigue of the gastrocnemius was apparent. Stimulation of the sympathetic nerve was accompanied in most cases by an increased height of contraction, usually after a latent period of 1-2 sec. The experiment could be repeated until the muscle was completely fatigued and again after a resting period of a few minutes. Better results could be obtained with very fatigued muscle. The negative results in some cases were attributed partly to the atonicity of the muscles and partly to the muscles not being sufficiently fatigued, this being in accord with the theory of Ginetsinskii. (German summary.)—(*Biol. Abst. VII*: 3262).

3711. Gollwitzer-Meier, K. Über die gleichzeitige Erregung antagonistischer Zentren. (The simultaneous excitation of antagonistic centers.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 227, 549-557.—(*Biol. Abst. VI*: 18627).

3712. Hiller, F., & Tennenbaum, A. Existiert ein Zuckerzentrum in der Medulla oblongata? (Is there a sugar center in the medulla oblongata?) *Zsch. ges. Neur. u. Psychiat.*, 1931, 131, 95-145.—(*Biol. Abst. VII*: 877).

3713. Lafon, G., & Coulouma, F. Considérations sur l'excitabilité neuro-musculaire en fonction du temps et de l'intensité du courant excitant. Rectification. (Considerations on neuro-muscular excitability as a function of time and of the intensity of the exciting current. Correction.) *J. physiol. et pathol. gén.*, 1931, 29, 521.—(*Biol. Abst. VII*: 879).

3714. Lhermitte, J. Etude de la commotion de la moelle. (Study of concussion of the cord.) *Rev. neur.*, 1932, 39 (I), 210-239.—A summing up of knowledge on this question. The author, after his

personal observations, declares that it is not impossible that in concussion where the disorganization of the tissues is less serious than in contusional lesions, an anatomical regeneration of the fibers, the roots and the posterior funiculi is effected, which accounts for the disappearance of certain disorders of objective sensation. This does not account for the restoration of the other functions, and the author supposes, basing his supposition on anatomical facts, that the concussion alteration was able to limit its effects to the alteration of the myelin by sparing the axis cylinder. But it is the role of the myelin to assure the conduction of the nerve impulse. It is logical to think that in most disturbed functions morphological restoration is established at the same time as functional recuperation, thanks to the new formation of the degenerated myelin sheaths.—*Math. H. Piéron* (Sorbonne).

3715. Lhermitte, J. *La régulation des fonctions corticales.* (The regulation of the cortical functions.) *Encéph.*, 1932, 27, 757-785.—There exists at the base of the encephalon, in the meso-diencephalic and myelencephalic region, a region whose rhythmic activity regulates the processes of inhibition and excitation in the cerebral cortex. It is a nervous center drawing its fibers from and discharging its neurons into the whole length of the case of the myelencephalon and the mesencephalon, whose oral extremity opens on the ventral walls of the third ventricle. It is this point which is the most sensitive of the system, and which responds to the excitations which are sent to it in the development of a wave of inhibition whose extension tends to submerge cortical activity. When the functions of consciousness sink after an injury to the myelencephalon, this dwarfing is accompanied by a host of sensations, feelings and emotions which go from anxiety to the most extreme anguish; and it seems to the subject that he is dying. When, on the contrary, the disorder of consciousness depends upon injury to the meso-diencephalic apparatus, the vegetative equilibrium is upset, and the consciousness is obscured and can even be lessened, but the subject leaves reality and lives a life of the imagination, freed from all restraint, which he himself has created.—*Math. H. Piéron* (Sorbonne).

3716. Lillie, R. S. *Protoplasmic action and nervous action.* Chicago: Univ. of Chicago Press, 1932. Pp. xiii + 417. \$3.00.—Unchanged from original edition except for additional references.—*H. Hoagland* (Clark).

3717. Mansfeld, G., & Hecht, K. *Über die Gültigkeit des Alles-oder-nichts-Gesetzes der Erregung. V. Experimenteller Teil.* (The validity of the all-or-none law of excitation. V. Experimental part.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 227, 797-806.—(*Biol. Abst.* VI: 18638).

3718. Müller, L. R. *Lebensnerven und Lebenstriebe.* (Life nerves and life drives.) Berlin: Springer, 1931. Pp. 991. RM. 99.8.—(*Biol. Abst.* VI: 18643).

3719. Müller, L. R. *Die Einteilung des Nervensystems nach seinen Leistungen.* (A classification of the nervous system according to its functions.)

Leipzig: Thieme, 1933.—Three nervous systems may be distinguished. Having devoted an earlier book to the "life system" the author now undertakes an account of (1) the system by which involuntary muscles and general posture are governed (*systema nervorum myotonicum et myostaticum*); and (2) the system of nervous structures which governs environmental contacts such as action and speech (*systema nervorum pro mundo*). Special emphasis is placed upon psychological capacities (*Leistungen*). Since we find even very young babies capable of mimicry, it is evident that this must be subject to release even by very elementary ganglia. Apparently pleasure and displeasure as well as hunger and thirst should also be localized in this region. The control of waking and sleeping must also be contained in the walls of the third ventricle. On the other hand, processes connected with memory, knowledge, recognition, conceptualization, self-consciousness, will, directed activity, and finally speech are processes which must be sought in the pallium. This emphasis upon a functional classification of individual parts of the nervous system is not made, however, at the cost of considerable emphasis upon the unity with which the system operates as a single whole.—*L. R. Müller* (Erlangen).

3720. Rijlant, P. *Introduction à l'étude du fonctionnement des centres nerveux.* (Introduction to the study of the functioning of the nervous centers.) *C. r. Soc. biol.*, 1932, 111, 636-638.—In *Hydrophila*, the characteristics of the extensor muscles and the flexor muscles have normal values as long as the thoracic center corresponding to the muscles examined is intact. Only the plasticity of the tonus disappears, or is greatly diminished. The fibers in true contraction show in experimental preparations an activity identical with that which they possess in the intact animal. The characteristics of their activity are, then, equally the result of the work of the thoracic ganglion. An interdependence of responses due to a mechanism of reciprocal innervation, analogous to that demonstrated in mammals by Sherrington, is then manifest in *Hydrophila*.—*Math. H. Piéron* (Sorbonne).

3721. Rudéanu, A., & Bonvallet, M. *Rôle du cervelet dans la régulation des chronaxies motrices périphériques. Relation avec la coordination.* (The rôle of the cerebellum in the regulation of peripheral motor chronaxies. Relation to coordination.) *C. r. Soc. biol.*, 1933, 111, 962-964.—The authors try to find out whether the cerebellum plays a part in the regulation of the chronaxies. They find that disorders of coordination provoked by lesions of the cerebellum are always accompanied by an equalization of the chronaxies.—*Math. H. Piéron* (Sorbonne).

3722. Schmitt, F. O. *The oxygen consumption of stimulated nerve.* *Amer. J. Physiol.*, 1933, 104, 303-319.—"A sensitive method is described for the simultaneous measurement of the oxygen consumption, electric response (spike and after-potential), strength, and frequency of stimulation. A contribution is made to the controversy regarding the arti-



ficiality of the excess oxygen consumption which results from direct electrical stimulation of nerve. It can be shown by three distinct methods that the small increase (15 per cent) in respiration of American green frog sciatics and bull frog motor roots resulting from stimulation depends upon the production of action potentials and is independent of the electrical energy of the stimuli. It is pointed out that the absolute increase of respiration resulting from stimulation varies only qualitatively with spike height." The excess metabolism of nerve activity is probably associated with the after-potential rather than the spike processes.—C. Landis (N. Y. Psychiatric Institute).

3723. Schmitz, W., & Schaefer, H. Über den Nervenaktionsstrom und die positive Nachschwankung. (On the action current of nerve and the positive after-deflection.) *Pflüg. Arch. f. d. ges. Physiol.*, 1933, 232, 7-19.—B. F. Skinner (Harvard).

3724. Schmitz, W., & Schaefer, H. Zum Nachweis der Polarisationskapazität am Nerven. (The demonstration of polarization capacity in nerve.) *Pflüg. Arch. f. d. ges. Physiol.*, 1933, 232, 20-23.—B. F. Skinner (Harvard).

3725. Schneider, K. Der Einfluss des Sympathicus auf die quergestreifte Muskulatur. (The influence of the sympathetic on the striate musculature.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 227, 293-300.—(*Biol. Abst.* VII: 885).

3726. Villiger, E. Periphere Innervation. (Peripheral innervation.) (6th ed., by E. Ludwig.) Leipzig: Engelmann, 1933. Pp. 166. RM. 9.—The origin, development and extension of the spinal cord and brain as well as the autonomic system are discussed with especial reference to their pathology. The book is intended as a text book for medical students.—E. Ludwig (Basel).

3727. Wachholder, K. Die allgemeine physiologischen Grundlagen der Neurologie. IV Teil. Allgemeine Physiologie des Zentralnervensystems (Schluss). (The general physiological foundations of neurology. Part IV. The general physiology of the central nervous system (conclusion).) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, 5, 53-88.—The author has divided the article into three parts. The first deals with inhibition, summation, and facilitation, in nerves and in reflexes. The second is concerned with the period of activity and reciprocal innervation. The third takes up the chemical changes in both the central and peripheral systems during excitation. There is a full bibliography.—D. S. Oberlin (Bryn Mawr).

3728. Walther, K., & Spörri, H. Ueber die Beeinflussung der sensiblen Chronaxia durch Lichtstrahlen verschiedener Wellenlänge. (The influence of light rays of various wave lengths on sensory chronaxy.) *Zsch. f. physik. Therap.*, 1932, 42, 212-226.—Radiation of the sensory nerves of the skin with red, blue or ultra-violet light causes a similar change in chronaxy: an initial depression followed by a rise; and therefore an increase of irritability succeeded by a decrease.

Red light has the quickest, but also the most transient effect. Ultra-violet rays work more slowly, but their effect is more persistent. In other words, the sensory nerves undergo a transformation of greater or less duration.—M. E. Morse (Catonsville, Md.).

[See also abstracts 3617, 3673, 3758, 3759, 3772, 3794, 3914, 3916.]

## MOTOR PHENOMENA AND ACTION

3729. Adolph, W. H., Wang, T. Y., & Wang, P. C. Emotional glycosuria in Chinese students. *Chinese J. Physiol.*, 1933, 7, No. 1, 1-4.—Two series of measurements of urinary and blood sugar under stress of examination were made, one with 36 students in June, 1930, the other with 40 students in January, 1932, about three fourths of the subjects in each group being men and one fourth women, mainly pre-medical students, and selected at random. The examinations chosen were mainly in chemistry, with a few in biology and physics, and all lasted two hours. The diet of these students was the typical high carbohydrate vegetarian diet of the Orient. Blood sugar was determined by the micro-method of Folin and Malmros, and urine sugar by Benedict's picrate method. Control samples for blood sugar from 17 of the subjects included in Series I were taken one week before the experimental day. In each case two samples were taken for the same two-hour interval corresponding to those just before and after the examination on the experimental day. Among the total of 76 students examined, only one case of glycosuria was found—a subject in Series I. It would appear that "emotional glycosuria" is not characteristic of Chinese students. There are two tables giving "urine sugar and blood sugar controls for 17 Chinese students" and "urine sugar and blood sugar levels for 76 students taking an examination" respectively.—C. F. Wu (Nat. Res. Instit. Psychol., Shanghai, China).

3730. Allport, G. W., & Vernon, P. E. Studies in expressive movement. New York: Macmillan, 1933. Pp. xiii + 269. \$3.00.—Part A treats the problem of the consistency of individuals in respect to their habits of gesture and their style of expression. Previous literature is reviewed, and a tentative classification of expressive movements offered. 25 male subjects took part in experiments designed to measure the speed, tension, extent, variability, pressure, and other peculiarities of natural movement. Repeat reliabilities were determined as well as the internal consistency of certain combined and composite measures. Typical results: (1) Tests repeated in the same experimental session have average reliabilities of .75; those at different sessions, .64, showing that temporary factors (e.g., mood) play an appreciable but not exclusive part in determining consistency. (2) The average correlations for tasks performed with different groups of muscles are virtually as high as those performed with identical muscles. (3) There is no evidence for a uniform "psychic tempo," but rather for three somewhat broad speed factors—verbal, manipulative, rhythmic. (4) 34 variables, each con-

taining two or more measures, have an average corrected consistency of .813. (5) There seem to be three psychomotor "group factors,"—the areal, centrifugal, and emphatic, which are self-consistent enough to be considered as expressive traits. (6) The constitution of these measures show that psychological (meaningful) and not physical measures of consistency must be employed. (7) There is little evidence for a common motility factor saturating all measures. In addition to these correlational measures of consistency, a concept of congruence is introduced to account for still higher consistencies which are encountered when the results are viewed in the light of individual psychomotor case studies and meaningful analysis. Part B reviews critically recent experimental work in graphology, and presents two experiments which were designed to test the skill of graphologists and laymen. Matching and identification were the principal methods used. "Although the results are not greatly above chance, yet their uniformity (whatever the method used), together with the prevailing 'good errors' and occasional brilliant successes, suggest even higher validity which, owing to methodological inadequacies, remains so far unestablished." "Regarding the value of commercial graphology the authors have no final opinion. Probably too much has been claimed for it by graphologists and too little by psychologists." The authors believe that their work demonstrates that gesture and handwriting both reflect an essentially stable and constant individual style, and that the theories of specificity and identical elements are wholly inadequate to account for the consistency obtained. They favor such theories as admit widespread generalization of motor function, and which regard movement as a reflection of well-organized dispositions in personality.—G. W. Allport (Harvard).

3731. Antoni, N. *Filmdemonstration till muskel-reflexernas mekanik.* (Film demonstration on the mechanics of muscle reflexes.) *Svensk. läkart.*, 1933, 30, 75-80.—The film was shown to substantiate the view of the nature of muscle reflexes held by Sternberg, Sherrington, Trömner, Weizsäcker, and especially Paul Hoffmann, who employs the term *Eigenreflexe der Muskeln*. A lengthy discussion by various members of the audience is appended, dealing mainly with questions of terminology.—M. L. Reymert (Mooseheart Laboratory for Child Research).

3732. Arkhangelskii, V. M. *Uslovni refleksi u kastratov sobak.* (Conditioned reflexes in castrated dogs.) *Russkii fiziol. zh. Sechenova*, 1931, 14, 268-279.—Experiments were performed on five dogs (4 ♂ and 1 ♀), two of which ("early castrates") were castrated before sexual maturity (6-7 weeks old), the others after sexual maturity ("late castrates"). In the former, formation of conditioned reflexes was attempted only after castration. Conditioned reflexes could not be formed in "early" castrates. This, presumably, was due to the insufficient excitability of the nerve cells. In "late" castrates the conditioned reflexes and differentiation ability were markedly weakened. Many stimulations which had produced

marked and lasting impressions before castration were not effective afterwards. This is correlated with the limited creative abilities and interests of human castrates. Implantation of testicles in one of the castrated dogs completely restored the normal function of the cerebral cortex, but these experiments have not been completed. (German summary.)—(*Biol. Abst.* VII: 3193).

3733. Arkhangelskii, V. M. *Uslovnie refleksi u sobak posle perev'yazki i pererезki semennikh kanalikov.* (Conditioned reflexes in dogs after ligation and cutting of the spermatic cords.) *Russkii fiziol. zh. Sechenova*, 1931, 14, 255-267.—Two ligatures were placed on each of the spermatic cords of a dog, the ligatures being 2.5 cm. apart. The sections between the ligatures were dissected out. The experiments started on the thirteenth day after the operation. All forms of inhibition were absent after the operation, all the negative conditioned reflexes being destroyed and the negative reactions becoming positive. The stimulating process, remaining quantitatively within normal limits, became more stable. These reactions were similar to those obtained previously by the author after implantation of testicles into sexually mature males, but were not so marked. It is suggested that these changes in the activity of the central nervous system were due to an increase in the quantity of testicular hormones in the body, implantation giving a greater increase than ligation. (German summary.)—(*Biol. Abst.* VII: 3191).

3734. Aubry, M., & Causse, R. *L'abolition éleéctive du nystagmus provoqué de forme rotatoire (pseudo-paralysie des canaux verticaux).* (The selective abolition of induced nystagmus of rotary form (pseudo-paralysis of the vertical canals).) *Rev. neur.*, 1932, 39 (II), 264-275.—The authors believe that no paralysis of the vertical canals exists, and that the only thing abolished is the particular power of labyrinthine activity to engender rotary movements of the eye-ball. The authors believe that it is more legitimate and more fruitful to visualize the selective abolition of induced nystagmus of rotary form as a paralysis of function, rather than as a paralysis of the vertical canals.—Math. H. Piéron (Sorbonne).

3735. Babskii, E., & Leites, R. *O vozmozhnosti obrazovaniya uslovnogo refleksa na otravlenie benzolom.* (Formation of a conditioned reflex on benzene poisoning.) *Russkii fiziol. zh. Sechenova*, 1931, 14, 223-231.—Experiments were performed on seven dogs (two of which died after the first poisoning) and three cats. The animals were placed in a special cage in which air mixed with definite concentrations of benzene was circulated. The cage by itself had no effect on the behavior of the animals. One minute after the dog was introduced into the cage (with benzene) excessive salivation and restlessness developed, followed by increased respiratory rate and shivering culminating in general tonoclonic convulsions, increased muscular tonus, and extension of the forelimbs. A longer period caused complete loss of equilibrium and finally death, the extremities being rigid, as in decerebration. Similar results were



obtained with cats, except that the reaction (due to a weaker concentration of benzene) was slower. 3-18 min. after the removal of the animals from the cage all symptoms of poisoning disappeared. After 6-13 experiments with benzene, the animals were placed in the same cage, with pure air. In four (out of five) dogs and in all the cats a conditioned reflex was obtained which took the form of the first symptoms of benzene poisoning (salivation, increased respiratory rate, and weak convulsions). Repetition of the conditioned reflex (without benzene poisoning) resulted in the disappearance of the reflex, which could be restored by repeated benzene poisoning. (German summary.)—(*Biol. Abst.* VII: 3194).

3736. Bruce, R. W. Conditions of transfer of training. *J. Exper. Psychol.*, 1933, 16, 343-361.—An investigation of some of the conditions of transfer of training. The results of the study are formulated in a set of laws which have predictive value, since they state some of the main objective conditions under which positive and negative transfer may be expected to occur. The laws concerning the conditions of transfer of training are as follows: (1) Learning to make an old response to a new stimulus results in a marked degree of positive transfer. (2) Learning to make a new response to a new stimulus results in a slight degree of positive transfer. (3) Learning to make a new response to an old stimulus results in a slight degree of negative transfer. (4) Introducing similarities between two or more of the  $S_1R_1S_2R_2$  terms increases positive transfer, and decreases negative transfer. (5) With increasing degrees of integration of the initial learning, there is an increase in the amount of positive transfer, and a decrease in the amount of negative transfer; where the amount of negative transfer is slight, it shifts to positive transfer.—H. W. Karn (Clark).

3737. Castex, E. Contribution à l'étude graphique du réflexe rotulien chez l'homme. (Contribution to the graphical study of the knee jerk in man.) *J. physiol. et path. gén.*, 1931, 29, 242-255.—(*Biol. Abst.* VI: 18617).

3738. Cook, T. W. Studies in cross education. I. Mirror tracing the star shaped maze. *J. Exper. Psychol.*, 1933, 16, 144-160.—For the purpose of measuring transfer 19 subjects were given 100 trials of practice in mirror tracing a star-shaped maze with the right hand. Tests for transfer were made with the right foot, left foot and left hand. This procedure was repeated with 20 subjects, the 100 practice trials being made with the left foot. There was some transfer to all muscle groups, but it was greatest to the symmetrical muscle group on the opposite side of the body and next to the muscle group on the same side of the body. Transfer was least to the muscle group which is both unsymmetrical and on the opposite side of the body from the practiced hand or foot. There was no difference between the amount of transfer from hand to foot or from foot to hand.—S. Renshaw (Ohio State).

3739. Covaciu-Ulmeanu, —. Modifications de la chronaxie au cours de l'entraînement physique.

(Changes in chronaxy in the course of physical exercise.) *Travail Humain*, 1933, 1, 56-64.—Chronaxy was measured from the motor point by the technique involving a discharge of condensers. After a period of work chronaxy rises gradually to a point somewhat above normal and then decreases to approximately normal. The extent of this rise was determined at various amounts of work on successive days. While the amount of work which could be done in a trial increased from day to day through the experimental period, the greatest variation in chronaxy occurred a few days after the beginning of the experiment and decreased distinctly for the later days of the experiment.—H. E. Burt (Ohio State).

3740. Eccles, J. C., & Sherrington, C. Studies on the flexor reflex. I. Latent period. II. The reflex response evoked by two centripetal volleys. III. The central effects produced by an antidromic volley. IV. After-discharge. V. General conclusions. *Proc. Roy. Soc. [London]*, 1931, B107, 511-605.—(*Biol. Abst.* VII: 873).

3741. Ehrenwald, H. Ueber einen photo-dermatischen Tonusreflex auf Bestrahlung mit farbigen Lichtern beim Menschen. (A photo-dermatological tonus reflex in man due to radiation with colored lights.) *Klin. Woch.*, 1932, 11, 2142-2143.—100 subjects, with eyes closed and the effect of warmth eliminated, were radiated in a dark room with red and blue lights. With the red light, a movement of the arm (deviation reaction) occurred after  $\frac{1}{4}$ - $\frac{1}{2}$  minute toward the radiated side. The blue light caused the opposite reaction. Yellow light had the same effect as red; green the same as blue. Infra-red and ultra-violet rays also influenced muscle tone. The reflex occurs also in the blind. It is obtained by radiation of only the lateral surfaces of the face and neck.—M. E. Morse (Catonsville, Md.).

3742. Fessard, A., Laugier, H., & Nouel, S. Sur un indice de ténacité au cours du travail statique. (An index of persistence in the course of static work.) *Travail Humain*, 1933, 1, 32-48.—The subject squeezes a rubber bulb filled with mercury and driven up and down a glass tube with a recording float. The subject squeezes this with the greatest possible force and attempts to hold it in that position. The downward course of the mercury indicates fatigue. A factor of persistence or endurance is distinguished from the actual force exerted. The two show a low correlation. This persistence factor may be revealed by having the subjects hold the mercury at about two-thirds of its maximal height and getting the typical fatigue curve at that point. Any value down to one-half the maximum is fairly satisfactory, but below that level fatigue is too slow in developing.—H. E. Burt (Ohio State).

3743. Hausman, G. Muskelgrösse, Reizstärke und Zuckungshöhe bei direkter Reizung mit Sättigungsströmen. (Muscle size, strength of stimulus, and amplitude of response in direct stimulation with saturation currents.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 229, 288-298.—(*Biol. Abst.* VII: 3269).

3744. Horton, H. S. Physiology of muscle action and fatigue applied to myologic technique. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).
3745. Hoskins, R. G. The tides of life: the endocrine glands in bodily adjustment. New York: Norton, 1933. Pp. 352. \$3.50.—The author presents a comprehensive, scientific survey of the present status of knowledge concerning the endocrine glands.—W. S. Hunter (Clark).
3746. Johnson, C. A., & Luckhardt, A. B. Knee jerk. IX. The effects of stimulation of some abdominal viscera on the patellar jerk. *Arch. Neur. & Psychiat.*, 1931, 26, 162-166.—(*Biol. Abst.* VII: 878).
3747. Koch, H. L., & others. A study of the nature, measurement, and determination of hand preference. *Genet. Psychol. Monog.*, 1933, 13, 117-221.—The manual choices in 105 situations of 201 university students were studied by means of observations of actual behavior and by means of a questionnaire paralleling these observations. The conclusions reached include the following: The selection of the right hand to dominate in an adjustment tends to occur more frequently in the unimanual than in the bimanual tasks and in the "taught" than in the "untaught" tasks. Several of the indices which have been used frequently in previous studies of handedness appear to be among the least satisfactory of the tests here described as regards prediction. The more elaborate and delicate adjustments seem to have the greatest predictive value. Correlations between handedness of siblings or between subjects of this experiment and other relatives are low. The side upon which the subjects report that they prefer to sleep tends to correspond to that on which the preferred hand is found, as do also the side of the mouth preferred for biting and the shoulder used with gun or bat. Other positive correlations were found between preferred hand and uppermost leg when sitting with legs crossed, and with direction in which head is turned when straining to hear. Difficulty in discriminating between right and left, as well as depending upon arbitrary or visual cues in learning to make the differentiation, seems to be associated slightly with lack of coincidence as to side of sighting eye and dominant hand. Little relationship was found between speech difficulties and left-handedness. In strength of preference for the right hand the sexes seem about equal. The results suggest that "hand preference is a trait influenced by many variables, among which are: instruction, example, convenience, obviousness of choice, previous habits, specific nature and familiarity of the tasks to be performed, hand strength, and genetic factors."—F. M. Teagarden (Pittsburgh).
3748. Kriaschew, —. Komplexmethodik der integralen Erforschung der höheren Nerventätigkeit nach der Methode der bedingten Reflexe von Pawlow. (A complex methodology of integral investigation of higher nerve activity according to the conditioned reflex method of Pavlov.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 228, 295-309.—(*Biol. Abst.* VI: 18632).
3749. Kurtz, J. I. Eyedness and handedness. *Amer. J. Optom.*, 1932, 9.—R. R. Willoughby (Clark).
3750. La Grange, A. J. Veranderinge in die uitvoer van gedetermineerde handelinge deur herhaling. (The nature and causes of the changes which arise in the successive execution of predetermined tasks.) *So. Afric. J. Psychol. & Educ.*, 1932, 1, 7-30.—Part I of this investigation is here reported. It deals with the analysis of unusual tasks. Section I is a motor problem—mirror tracing (see Whipple's *Manual*, vol. II, p. 122, fig. 64; instructions somewhat altered). There were five subjects. Tables and charts depict the results. Section II deals with intellectual problems, involving the abstraction of certain required *Gestalten* from a given arrangement of dots on a card (three illustrations), and the completion of ten subtraction sums in which the order of the decimal functions is reversed (units to left, thousands to right). Tables and charts depict the results. The significance of quantitative and qualitative results of both sections is then discussed at length, largely in terms of the earlier work of O. Selz. Considerable space is given to introspective reports, which are classifiable with reference to their bearing on the problem. Findings are reported in detail.—O. L. Harvey (Cambridge).
3751. Lipmann, O. Leistungsfähigkeit und Selbstbeanspruchung. (The capacity for achievement and the demands which one places upon oneself.) Leipzig: Barth, 1932. Pp. 38. RM. 2.40.—The chapter headings are: I. The concept "accomplishment-readiness." II. Further developments of this concept. III. Various conditions of self-demand (*Selbstbeanspruchung*). IV. Weariness, dullness and laziness. V. Training. VI. Mental fatigue and refreshment. VII. The determinants of self-demand. VIII. Fatigue, dullness, rest and sleep. Frequent references are made throughout the book to William James' *The Energies of Man*.—O. Lipmann (Berlin).
3752. Meignant, P. Les réflexes conditionnels. (Conditioned reflexes.) *Encéph.*, 1932, 27, 786-824.—The question is set forth according to the two books of M. N. Iachlonsky and Pavlov's lessons on the activity of the cerebral cortex.—Math. H. Piéron (Sorbonne).
3753. Moore, A. R., & Brücke, E. T. Über Unterschiede zwischen direkter und indirekter Erregung eines Muskels und seiner einzelnen Fasern. (The difference between direct and indirect excitation of a muscle and of its separate bundles.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 228, 619-631.—(*Biol. Abst.* VII: 3289).
3754. Parker, G. H. On the trophic impulse so-called, its rate and nature. *Amer. Natur.*, 1932, 66, 147-158.—(*Biol. Abst.* VII: 3227).
3755. Porak, R. Psychophysiologie de l'homme. I. La détente du cycle moteur. II. Le freinage des rythmes d'après le thermomètre clinique. III. Le démarrage des rythmes d'après la thermomètre clinique. (Psychophysiology of man. I. The regulation of the motor cycle. II. The inhibition of rhythms according to the clinical thermometer. III. The



release of rhythms according to the clinical thermometer.) *Prog. méd.*, 1932, No. 39, 1617-1627; No. 40, 1649-1657; No. 41, 1697-1782.—The author looks for a measurable function closely allied to dynamogenesis in thermogenesis, and he measures the release and checking of daily rhythms by rectal temperature. Neuro-motor activity has a rhythm: rise, expansion, weakening of the functions of relation, and immobilization for a new effort. After sleep, neuro-motor energy makes felt an urge toward expansion, but does not immediately attain its best form; there is a transition phase between sleep and activity as well adapted as possible to the circumstances of the waking state. Conversely, normal sleep is not attained without having freed for the neuro-motor system the energy whose urge is felt from the moment of waking. According to whether the euphorizing expenditure of energy is more or less exactly attained, the entry into sleep will be more or less good. This euphoria is measured by the depth of the thermic fall; the regulation by dynamogenic mechanism, after the neuro-motor needs have matured, represents the primitive mechanism of checking the rhythms; that is to say, sleep as well as waking represents the release of these same rhythms. The author is for the most part in agreement with Claparède's theory of sleep.—*Math. H. Piéron* (Sorbonne).

3756. Porak, R. Test thermique et psychologie. (Thermic test and psychology.) *Rev. gén. des sci. pures et appl.*, 1932, 43, 633-637.—The author tries to elucidate the question: Does the temperature test permit the demonstration of the intervention of psychic forces? The will to power is the most potent eliciting agent of thermogenesis. There is in man a constant circulation of ideas which are more or less charged with affect. These psychic forces act upon the temperature. The affective adjuncts are more important than the purely intellectual adjuncts.—*Math. H. Piéron* (Sorbonne).

3757. Pyle, W. H. Origin of the pleasure-pain theory of learning. *J. Educ. Psychol.*, 1933, 24, 303-304.—It is pointed out that Aristotle and Locke had both enunciated a pleasure-pain view and that this view did not originate with Spencer, Bain and Baldwin, as Cason has stated (*Psychol. Rev.*, 1932, 39, 440-466).—*J. A. McGeech* (Missouri).

3758. Rademaker, G. G. J., & Garcin, R. Le réflexe de clignement à la menace. Sa valeur diagnostique dans les lésions corticales et occipito-rolandiques des hémisphères cérébraux. (The reflex of winking at a menace. Its diagnostic value in cortical and occipito-rolandic lesions of the cerebral hemispheres.) *C. r. Soc. biol.*, 1932, 111, 547-450.—The winking reflex obtained by a thread behaves like a conditioned reflex; it can be abolished except in hemianopsia from cortical rolandic lesions and hemispheric lesions involving the occipito-rolandic area of the opposite side. This reflex appears especially as a cortical reflex, and must be distinguished from the dazzling reflex and from the corneal reflex, which behave like trajectory reflexes, sub-cortical and mesencephalic.—*Math. H. Piéron* (Sorbonne).

3759. Rademaker, G. G. J., & Garcin, R. Notes sur quelques réactions labyrinthiques des extrémités chez l'animal et chez l'homme. (Notes on some labyrinthine reactions of the extremities in the animal and in man.) *Rev. neur.*, 1932, 39 (1), 637-653.—In the delabyrinthated animal, rapid displacements in space are not accompanied by any of the reactions of the extremities which tend to re-establish equilibrium automatically, while in slow displacements these reactions are all present. On the other hand, these reactions are present in both slow and rapid displacements in all decerebellated animals. The labyrinth appears to be an organ with power to equilibrate the body in rapid displacements, proprioceptive reactions assuring the maintenance of the equilibrium in progressive displacements. The authors have found the same reactions in man by means of a new test of their invention: a tip-table allowing them to compare the speed of rotation as well as angles from which the reactions of the extremities come into play.—*Math. H. Piéron* (Sorbonne).

3760. Rey, A. Note sur le phénomène de reprise en ergographie bilatérale et simultanée. (Note on the phenomenon of recovery in bilateral and simultaneous ergography.) *Arch. de psychol.*, 1932, 23, 344-348.—The phenomenon of recovery is that which is observed when the subject passes from bilateral and simultaneous ergography of the two homolateral limbs to monolateral ergography. This phenomenon has been observed in man by Claparède and has also been studied by Rimathé. The author found the same phenomenon in the guinea pig and the frog in ergograms obtained by induction shocks given by means of electrodes applied to the legs, the animals being conscious or only slightly anesthetized. In man, the electric stimulus gives the same phenomenon under slightly different conditions. The author favors a physiological hypothesis for explanation, but the mechanism is not given. Supplementary experiments are necessary.—*M. R. Lambercier* (Geneva).

3761. Rudéanu, A., & Bonvallet, M. Influence de la posture sur les chronaxies motrices des antagonistes. (The influence of posture upon the motor chronaxies of the antagonists.) *C. r. Soc. biol.*, 1932, 111, 960-962.—Experiments performed upon the pigeon confirm the results of L. and M. Lapique, who found that, in the frog, the chronaxy of subordination is dependent upon a reflex regulation, at a muscular point of departure which is a function of the attitude of the member. These experiments allow them to affirm that every change of posture provokes a variation of the peripheral motor chronaxies. However, they cannot authorize the conclusion that a general law governing this variation exists.—*Math. H. Piéron* (Sorbonne).

3762. Seckel, H. Über sogenannte "Kremasteratmen" beim Kinde (nebst Hinweis auf den weiblichen Kremasterreflex). (The so-called "cremaster respiration" in children; with a comment on the feminine cremasteric reflex.) *Jahrb. f. Kinderh.*, 1932, 134, 339-344.—(*Biol. Abst.* VII: 3234).

3763. Spengler, E. Untersuchungen mit Hilfe eines neuen Apparates zur exakten Prüfung der Muskel und Nervenregbarkeit am Menschen. (Investigations with a new apparatus on the exact testing of muscle and nerve excitability in man.) *Zsch. ges. exp. Med.*, 1930, 69, 337-355.—(*Biol. Abst.* VII: 886).

3764. Stevens, H. C., & Snodgrass, J. M. A quantitative study of the changes in power during muscular contraction. *Amer. J. Physiol.*, 1933, 104, 276-290.—"A technique is described by means of which the instantaneous tensions and lengths of the gastrocnemius of the decerebrate cat, indirectly stimulated, and contracting against an inertia disc, can be recorded for each eleven thousandths of a second. The power of the muscle, calculated for each 0.011 second, is found to be approximately constant for a period of about 40 sigma after the maximal force has been reached. During this period of constant power, force decreases with increasing velocity. The decrease in force with increasing speed of contraction is interpreted to be a result of the physical law which governs motion under constant power. If power is constant, force must necessarily decrease as velocity increases. Power is shown to be approximately constant during that part of the muscular contraction in which 65 per cent of the work is done. During this period of constant power, force decreases with increasing velocity."—C. Landis (N. Y. Psychiatric Institute).

3765. Teagarden, F. M. The psychological respectability of the concept "will." *Kadelp. Rev.*, 1933, 12, 303-311.—Teagarden presents a theoretical discussion of the concept of will, pointing out the intricacies of the problem and the dilemma in which the individual who tries to see the truth in the many antagonistic arguments offered finds himself. The difficulty of the behaviorists in dealing with this concept and their various attempts at explanation in terms devoid of mentalistic flavor are considered. Modern experimental attacks on the problem and antecedent research are reviewed. It is brought out that, despite this struggle to arrive at a decision regarding the existence of will, the concept is used as fact in many fields, particularly the applied fields. Finally Teagarden answers her own question regarding the psychological respectability of the concept of will by saying, "If you are an out and out mechanist, then 'no.' If, on the other hand, you are interested in dealing with people and their behavior problems, then 'yes.'"—P. Seckler (Clark).

3766. Tiitso, M. Zur Kenntnis der propriozeptiven Atmungsreflexe. (On proprioceptive respiratory reflexes.) *Pflüg. Arch. f. d. ges. Physiol.*, 1933, 232, 140-147.—The reflex (A. Fleisch, *Pflüg. Arch.*, 1928, 219, 706) is a sudden change in the force of either inspiration or expiration elicited by introducing resistance into the path of the breathed air. The change is always in a direction to compensate for the effect of the resistance. The relation of the strength of the reflex to the phase of respiration at which the resist-

ance is introduced is reported.—B. F. Skinner (Harvard).

3767. Winterstein, H. Elektrische Reizung und physiologische Erregung. (Electrical stimulation and physiological excitation.) *Naturwiss.*, 1931, 19, 247-250.—(*Biol. Abst.* VI: 18658).

[See also abstracts 3680, 3690, 3704, 3710, 3713, 3718, 3725, 3768, 3775, 3786, 3793, 3812, 3837, 3842, 3854, 3919, 4011, 4051, 4060, 4070, 4197.]

#### PLANT AND ANIMAL BEHAVIOR

3768. Bayandurov, B. I. K fiziologii zritel'nogo analizatora ptits. (Physiology of the optic analyzer of birds.) *Russkii fiziol. zh. Sechenova*, 1931, 14, 77-85.—Experiments were performed on four pigeons. The pigeon was tied on a board hung from the ceiling of an absolutely dark chamber. Electrodes from an inductorium were attached to one free-hanging leg. The latter was attached to a lever which recorded the movement on a kymograph. As conditioned stimuli, figures (six different ellipses, circles and polygons) were shown to the bird. All the experiments were performed in a dark room, the figures being black and made visible by lighting an electric lamp. After 30-40 combinations (electric stimulation + figure) a conditioned reflex (moving away the leg) was established, which was in general similar to the conditioned reflexes to light, sound, darkness, etc. The optic analyzer of birds was capable of fine differentiation of figures of different sizes and forms. When a differentiation was attempted for ellipse No. 1 (which hardly differed from a circle), it was differentiated at first, but on further testing was not. The pigeon, which had been calm during all previous experiments, suddenly showed unrest, the differentiation returning only for the last ellipse (which differed most from a circle). This phenomenon was explained as due to the meeting of two simultaneous impulses of stimulation and inhibition, thus interfering with the normal function of differentiation possessed by the central nervous system. (German summary.)—(*Biol. Abst.* VII: 3195).

3769. Boulangé, H. Observations biologiques sur la larve d'*Empria abdominalis* F. et les causes déterminantes du fouissement. (Biological observations upon the larva of *Empria abdominalis* F. and the determining causes of digging.) *Bull. soc. entom. Fr.*, 1932, 37, 127-132.—Digging does not appear as a response to meeting with an obstacle. It can be explained only as a reflex released by an excitation of external origin, a blow on the head. The larva, having cast its covering as a result of an internal stimulus, feels at a given moment in its evolution the need for digging, and seeks to satisfy it. It succeeds only when it meets favorable conditions. With no question of a simple reflex or of a purely mechanical rôle of the obstacle, the larva tries out the possibility of burying its head. It tries to bury it in a special kind of soil, and abandons or gets over an obstacle which does not constitute a sufficient hindrance.—Math. H. Piéron (Sorbonne).



3770. Brückner, G. H. Untersuchungen zur Tier-soziologie, insbesondere zur Auflösung der Familie. (Studies in animal sociology, with special reference to the dissolution of the family.) *Zsch. f. Psychol.*, 1933, 128, 1-110.—Taking as his starting point Katz's suggestion that many sociological phenomena which appear to be typically human can be found also in sub-human forms, and might form the basis for an experimental comparative sociology, the investigator undertook to make a first study of the sociology of hens, with special reference to the conditions under which the family relationship of hen and chickens (gynopaedium) breaks down and gives place to a non-familial society (sympaedium). 36 families were studied, 12 of which had been incubator-hatched, and 4 individual chicks (the Kaspar Hauser chicks) were kept in complete isolation and observed. The method was that of intensive observation supplemented by experiment, and the attempt was made to determine the specific phases of development within the gynopaedium, the relationships between mother and chick and between chick and chick during these phases, the presence or absence of such psychological processes as memory and imagination, the effect of a change of mothers, etc. Conservative theoretical conclusions are drawn, and the possibility of an experimental comparative sociology is discussed.—*R. B. MacLeod* (Cornell).

3771. Buddenbrock, W. v. Beiträge zur Lichtkompassorientierung (Menotaxis) der Arthropoden. (Contributions on light-compass orientation or menotaxis in arthropods.) *Zsch. f. vergl. Physiol.*, 1931, 15, 597-612.—Some arthropods, in following a fixed path, are guided by stimulation from a source of light, e.g., certain ants returning to the nest. If the direction of the light is suddenly changed, the orientation of the animal changes in such a way as to restore the original direction of stimulation. The author has studied this reaction in beetles (*Geotrupes*, *Coccinella*, *Cassida*), in the phasmid *Dixippus*, in the ant-lion, in *Phalangium*, and in the isopod *Oniscus*. The angular threshold varies between 3 or 4° (*Cassida*) and 12° (*Dixippus*, *Oniscus*). The precision of compensation is also fairly close, with in general an excess of compensation.—*R. R. Willoughby* (Clark).

3772. Chauchard, A. B., & Chauchard, P. Influence des centres sur l'excitabilité des nerfs moteurs chez les crustacés. (Influence of the centers upon the excitability of the motor nerves in Crustacea.) *C. r. Soc. biol.*, 1932, 111, 621-623.—The augmentation of the chronaxy, in the case of section of a nerve, evidenced by Lapique in the frog, is also found in the crab. In this animal the section of the peri-esophagic connectives, a section which suppresses the action of the cerebral ganglia upon the motor nerves, is followed by an augmentation of the chronaxy of these nerves. A second augmentation is observed following the elimination of the sub-esophagic center by section of the motor nerve. Peripheral excitability is then, in this case, subordinated to the activity of both strata of the centers. At any rate, it is the action of the ganglia which seems the most marked.—*Math. H. Piéron* (Sorbonne).

3773. Dontcheff, L., & Kayser, C. Le mécanisme physiologique du rythme nyctéméral des mouvements d'énergie chez le pigeon. (The physiological mechanism of the nycthemeral rhythm of the movements of energy of the pigeon.) *C. r. Soc. biol.*, 1933, 112, 299-301.—The authors have shown in the pigeon that the nycthemeral rhythm of production of heat is due to the existence of conditioned reflexes of visual origin, with inversion by reversal of the hours of lightness and darkness. Gessler has admitted a diminution of activity at night of the thermo-regulatory centers, cold stimuli determining, in man, a small augmentation of exchanges in the night. The authors have not verified the hypothesis in the pigeon. At night the pigeon has a diminished tonus and its feathers are ruffled, but this ruffling does not interfere with the rhythm, because with ablation of the hemispheres it becomes constant, and moreover the rhythm continues. But when the postural tonus is abolished by section of the brachial plexus, there are no longer any rhythms, and the nocturnal diminution is insignificant. The nocturnal falling off is due to reductions of exchange by diminution of the postural tonus, in the absence of all sensory excitation.—*Math. H. Piéron* (Sorbonne).

3774. Dunlap, J. W. The organization of learning and other traits in chickens. *Comp. Psychol. Monog.*, 1933, 9. Pp. 55.—Using a variety of test situations such, for example, as a rotor, a tunnel, an S maze, a periscope, a multiple-T maze, and problem boxes, the author tried to determine "whether the traits underlying the measured performances of the chicks could be satisfactorily analyzed into a single general factor plus a specific factor for each test." Tetrad analysis of intercorrelations between the various scores was the method used. 119 chickens served as subjects. These were closely comparable in age, heredity, environment, etc. "The evidence presented," according to the author, "indicates that the table of intercorrelations based on ten different tests each on 119 chicks cannot be satisfactorily explained by one general factor plus specific factors." Various factor patterns were fitted to the data, and a six-factor pattern was most relevant. This comprised a general factor running through all ten tests (general fund of sensory-motor activity) and five group factors. There are detailed discussions in the appendices and in the body of the monograph concerning techniques for the analysis of data such as the above. Bibliography.—*N. L. Munn* (Pittsburgh).

3775. Dusser de Barenne, J. G., & Koskoff, Y. D. Weitere Untersuchungen über Beugestarrte der Hinterpfoten an der männlichen Rückenmarkskatze. (Further studies in the flexor rigidity of the hind limbs of the male spinal cat.) *Pflüg. Arch. f. d. ges. Physiol.*, 1933, 232, 56-60.—The flexor rigidity with accompanying priapism previously reported for "secondary" spinal cats (*Amer. J. Physiol.*, 1932, 102, 75) is also present in the "primary" spinal preparation (no previous decerebration). The reflex nature of the phenomenon is demonstrated.—*B. F. Skinner* (Harvard).

3776. Ellis, W. D. Untersuchungen an weissen Ratten. (Studies of white rats.) *Zsch. f. Psychol.*,

1933, 128, 203-231.—A simple complication arrangement and a modification of Lashley's "jumping" technique were used for the study of the behavior of 10 white rats in situations which called for detours in approach to objective, response to brightness relationships rather than to absolute brightnesses, the overcoming of obstacles, and the apprehension of numerical position within a series. It was found (1) that in a relatively complicated and completely strange situation the rats could find their way to a known objective, (2) that in an ordinary detour experiment they did not lose orientation in spite of being turned 180° away from the objective, (3) that they could distinguish between different shades of gray and could respond to brightness relationships rather than to absolute brightnesses, (4) that they could overcome slight obstacles, although greater obstacles baffled them completely, and (5) that they gave evidence of a performance very similar to counting. Striking individual differences are described, and the importance of an understanding of the individual animal within its concrete situation is emphasized. Docility and behavior constancy are found to be characteristic not only of the learning process but also of behavior in general.—R. B. MacLeod (Cornell).

3777. Fraenkel, G. *Die Mechanik der Orientierung der Tiere im Raum.* (The mechanism of the orientation of animals in space.) *Biol. Revs.*, 1931, 6, 36-87.—The author shows that, thanks to Kühn, the difficulties of the Loeb tropism theory can be resolved. He separates tropisms, which are changes in sessile animals, from tactisms, which are displacements of free animals; the latter are separated into phototactisms, consisting of flight movements from stimuli of intensity higher or lower than an optimum, and topotactisms, consisting of oriented movements with respect to a source of stimulation. Topotactisms are in turn divided into: (1) tropotactisms, which are determined by asymmetry of reception and lead to movements tending to restore symmetry; (2) telotactisms, which tend to maintain orientation; (3) menotactisms, in which the organism tends to maintain a constant angle with a direction of stimulation; and (4) mnemotactisms, in which a definite orientation is maintained in the absence of actual adequate stimulation. The types of reaction are discussed in full.—R. R. Willoughby (Clark).

3778. Frisch, K. v. *Über den Sitz des Gehörsinnes bei Fischen.* (The seat of the auditory sense in fishes.) *Zool. Anz., Suppl.*, 1931, 5, 99-108.—(*Biol. Abst.* VII: 8427).

3779. Frolow, J., & Charitonow, S. *Über die Grenzen und die Merkmale der biologischen Resistenz der Typen der höheren Nerventätigkeit der Tiere.* (The boundaries and signs of biological resistance of types of higher nervous activity in animals.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, 228, 17-29.—(*Biol. Abst.* VI: 18623).

3780. Goadby, A. *Conversing animals.* *J. Amer. Soc. Psych. Res.*, 1933, 27, 67-75.—Rejecting the view that the so-called "conversing" horses and dogs are

trained to respond to minute signals and that their feats make up a strictly limited program, the author reasons as follows: Co-consciousness consists of sub- and super-consciousness. "Consciousness is the Universal Reality." "The genes and their constituent elections are conscious concrete nuclei in Universal Mind, functioning toward an intelligible end and therefore manifesting intelligence." "Every living animal then possesses . . . both a super-consciousness and an etheric body whose existence before conception in form, consciousness and function explains the phenomenon of instinct." "The super-consciousness of animals and their etheric body survive their physical death." Apparitions of animals are adduced as proof. "If therefore, as we conclude, the super-consciousness of certain animals exhibits the evidences of genius which it does not possess, then it must be merely the instrument whereby some extraneous intelligence transmits these evidences into manifestation on the physical plane."—W. F. Prince (Boston).

3781. Henke, K. *Die Lichtorientierung und die Bedingungen der Lichtstimmung bei der Rollassel Armadillidium cinereum Zenker.* (Light orientation and the conditions of light response in the isopod *Armadillidium cinereum* Zenker.) *Zsch. f. vergl. Physiol.*, 1931, 13, 534-625.—In these isopods, which can be shown to be positively or negatively phototropic, or sometimes indifferent, according to circumstances, the author, after having determined the visual field of the compound eyes to be 250-270°, excluded one eye and established that the animal was then unable to orient itself to a light source. The normal animal, placed between two equal sources, orients itself along the bisector of the angle; variants are found, but can be shown to represent normal variability. The ommatidia are undifferentiated, and there is no anterior zone of fixation. High temperatures, dryness, and inanition tend to induce positive phototropism. Variations of brightness induce negative reactions. At constant illumination there are only the positive and negative alternatives. Negativity is favored by obscurity, which, however, is a rare phenomenon.—R. R. Willoughby (Clark).

3782. Hillier, W. T. *The lateral line sense-organs.* *Proc. Roy. Soc. Med.*, 1931, 24, 1675-1682.—(*Biol. Abst.* VI: 18599).

3783. Hoagland, H. *Electrical responses from the lateral line nerves of catfish. I.* *J. Gen. Physiol.*, 1933, 16, 695-714.—Records from the lateral line nerve in catfish show that the lateral line organs are in a state of continuous activity. The discharge may be increased by the application of pressure on the skin over the lateral line canal, by ripples in the water, etc. The asynchronous discharges tend to become synchronized with the application of vibratory stimuli from tuning forks. The frequency of nerve discharge rises with an increase in the temperature of the environment, and declines with a decrease in temperature. The possible inhibitory effects of the lateral line discharge are discussed.—C. H. Graham (Clark).



3784. Hoagland, H. Quantitative analysis of responses from lateral line nerves of fishes. II. *J. Gen. Physiol.*, 1933, 16, 715-732.—The lateral line nerves of trout as well as those of catfish discharge impulses spontaneously. The frequency of nerve impulses is measured as a function of the number of participating receptor groups, and a quantitative analysis is made of the contribution made by each group of sense organs. Variability of response data provide a basis for an estimate of damage due to surgical manipulation. A method is described for recording responses from one fiber in the nerve. When fitted by the Arrhenius equation the impulse frequency data yield a temperature characteristic of about 5000 calories. The variability data in the temperature experiments indicate the existence of temperature thresholds for spontaneous activity in different neuromasts. This spontaneous activity is considered in theoretical terms, and it is pointed out that the lateral-line system may serve as a model of the Purkinje cells in the cerebellum.—C. H. Graham (Clark).

3785. Hou, C. L., & Chia, K. F. The influence of the sympathetic on cardiac tonus in the toad. *Chinese J. Physiol.*, 1933, 7, No. 1, 81-90.—Pithed toads (*Bufo bufo asiaticus* Steindacher) of large size were used. The method of preparation was modified from the original of Gaskell. In 35 experiments (25 with suspension method and 10 with perfusion method), stimulation of the sympathetic nerve resulted in augmented cardiac contractions as indicated by an elevation in the base line of the cardiac tracing. This change was shown to be tonic, as it was not always observed simultaneously in the auricle and ventricle, and was present in isolated perfused preparations. The left cardiac sympathetic nerve seemed to be more concerned with the tonus of the heart than the right. The auricular tonic response persisted (in perfusion experiments) after the ventricular response had failed.—C.-F. Wu (Nat. Res. Instit. Psychol., Shanghai, China).

3786. Jellinek, A. Experimentelle Beiträge zur Lokalisation der akustischen Stellreflexe. (Experimental contribution to the localization of acoustic righting reflexes.) *Pflüg. Arch. f. d. ges. Physiol.*, 1933, 232, 116-119.—The movement of the head of the pigeon in the plane of a damaged semi-circular canal in response to a tone (reported by Tullio) persists after removal of the hemispheres and mid-brain. The reflex appears to be vestibular and its arc is confined to the deeper ganglia of the medulla.—B. F. Skinner (Harvard).

3787. Kellogg, W. N., & Kellogg, L. A. The ape and the child: a study of environmental influence upon early behavior. New York: Whittlesey House, 1933. Pp. 341. \$3.00.—The authors have taken a young chimpanzee, 7½ months old, born in captivity, from its mother and have reared it for 9 months with their son, who was 10 months old at the beginning of the experiment. The ape was never treated as a pet, but as a child, being clothed, bathed, fed, played with and talked to in the same way as the boy. The emphasis of the investigation was less upon formal

experimentation than upon the effect which the human social and psychological environments would have upon the specific behavior patterns developed by the chimpanzee. During the 9 months tests were made on both subjects for sensory and motor capacities, learning, the delayed reaction, and the Hobhouse-Köhler type of problem. In addition the subjects were given the Gesell tests for pre-school children. In the month to month tests, the boy was superior to the ape; but the final record showed that the ape had passed 42 new tests and the boy 46. The following additional results are of particular interest: The ape learned to walk upright and also to control its bladder and bowel needs to a marked degree, as well as to announce these needs when they appeared. At the age of 18½ months the boy "comprehended" 68 words or phrases. The ape at 16 months had a score of 58 words or phrases. In the delayed reaction the child was able to respond correctly after 5 minutes, but could not so respond after 10 minutes. The maximum interval for the ape was between 30 and 60 minutes. Neither subject needed to retain a bodily orientation. The author's account of the experimentation as a whole is divided among the following chapters: basic similarities and differences; health, eating, and sleeping; dexterity, arm movements, and walking; the senses; play; social and affectionate behavior; emotional behavior; learning, memory and recognition; intelligent behavior; communication and language. The volume is well illustrated.—W. S. Hunter (Clark).

3788. Kosaka, T., & Lim, R. K. S. On the mechanism of the inhibition of gastric motility by fat. An inhibitory agent from the intestinal mucosa. *Chinese J. Physiol.*, 1933, 7, No. 1, 5-12.—Picric acid preparations of the intestinal mucosa, blood after oil feeding, colonic mucosa, intestinal plain muscle, gastric mucosa, leg muscle, liver and fasting blood have been tested on gastric motility in dogs with simple fistulae. The first five preparations inhibit motility, the inhibitory potency being in the order given. The other preparations do not inhibit. The most potent preparations, viz., intestinal and colonic mucosae, are also the most effective for inhibiting gastric secretion. It therefore seems that one substance is responsible for the inhibition of motility and secretion. There are 8 figures giving the effect of the different preparations on gastric motility respectively, and also a table indicating the distribution of inhibitory potency among individual samples of picric acid preparations of various tissues.—C.-F. Wu (Nat. Res. Instit. Psychol., Shanghai, China).

3789. Luntz, A. Untersuchungen über die Phototaxis. I. Die absoluten Schwellenwerte und die relative Wirksamkeit von Spektralfarben bei grünen und farblosen Einzelligen. (Studies on phototaxis. I. The absolute threshold values and the relative efficiency of the spectral colors in green and colorless protozoans.) *Zsch. f. vergl. Physiol.*, 1931, 14, 68-92.—A study of the threshold of orienting or in some cases simple movement in three green protozoans, *Eudorina elegans*, *Volvox minor* (the colonies of which are more

sensitive to light when young) and *Chlamydomonas* sp., and in one colorless species, *Chilomonas* sp. In the ultra-violet the sensitivity is the same for the four species; in the other regions, the sensitivity is definitely greater for the green species. The colorless species does not have the pigmented spot, believed to be an eye, which is found in the others. The difference may be due to a reception by the general protoplasm in *Chilomonas* and by the pigmented spot in the other three, at least for the region beyond 400 mμ.—R. R. Willoughby (Clark).

3790. Maneval, H. Notes recueillies sur les Hyménoptères. (Notes gathered on the Hymenoptera.) *Ann. Soc. entom. de fr.*, 1932, 101, 85-110.—The author reviews the varying behavior of Hymenoptera. Studying the habits of an *Ammophila sabulosa* in process of digging its hole, the author wondered what would happen if the animal were confronted by a caterpillar taken by another wasp—what would it do? It is not driven by the need to lay eggs, since the digging precedes the egg-laying by one or several days. The experiment showed that the *Ammophila* precipitates itself upon its prey and behaves the same as it does at the moment of egg-laying. If the same experiment is done immediately after egg-laying, the behavior is different. At this time the animal is driven by an imperious stimulus which leads it to close its nest, and the disturbance caused by the appearance of the caterpillar is light and passing. The author shows a proof of the memory of this same animal. He changed the appearance of the entrance of two nests dug by two *Ammophilae* which the author had marked with red, and he saw, a week later, these two *Ammophilae* finding their two nests under the disturbed ground, and building new nests in the places of the two which had been destroyed. It seems that in field *Ammophilae* the approximate location of the hole is recognized by visual memory. The precise point is then found by the antennae by means of tactile or olfactory perception. In interpreting the behavior of the *Pompilia*, the author has decided that far from being afflicted by extreme myopia, as is generally believed, they are, on the contrary, presbyopic, and their vision carries 80 meters at least. In fact, at a short distance they see very badly, and their sense of smell supplements vision in acts of short carrying.—*Math. H. Piéron* (Sorbonne).

3791. Michel, K. Zum Akkommodationsvorgang im Schlangenaugen. (The accommodation process in the ophidian eye.) *Zool. Anz.*, 1932, 98, 158-159.—(*Biol. Abst.* VII: 8431).

3792. Minnich, D. E. The sensitivity of the oral lobes of the proboscis of the blowfly, *Calliphora vomitoria* Linn., to various sugars. *J. Exper. Zool.*, 1931, 60, 121-139.—(*Biol. Abst.* VI: 18602).

3793. Rijlant, P. Les manifestations électriques du tonus et des contractions volontaires et réflexes chez les arthropodes. (The electrical manifestations of tonus and voluntary and reflex contractions in arthropods.) *C. r. Soc. biol.*, 1932, 111, 631-635.—The manifestations of tonus in arthropods, clearly superimposed on those of man and mammals, are

distinct from manifestations of voluntary or reflex contraction. Two distinct elementary functional manifestations are present. The characteristics of the tonus are exaggerated, in spite of the muscular shortening, during the contraction of the muscle.—*Math. H. Piéron* (Sorbonne).

3794. Rizzolo, A. Studio cronassimetrico di alcuni punti motori della corteccia cerebrale in specie differenti di animali. (A chronaximetric study of some motor points of the cerebral cortex in different species of animals.) *Arch. fisiol.*, 1931, 29, 403-411.—(*Biol. Abst.* VI: 18650).

3795. Studnitz, G. v. Studien zur vergleichenden Physiologie der Iris. I. *Rana temporaria*. (Studies on the comparative physiology of the iris. I. *Rana temporaria*.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, 229, 492-537.—(*Biol. Abst.* VII: 8434).

3796. Vorwahl, H. Von der Tier- zur Menschenseele. (From the animal mind to that of man.) *Psychol. Rundschau*, 1933, 4, 257-261.—A comparison is made of animal reactions with those of man, accompanied by an analysis to discover to what extent animal behavior partakes of the characteristic of self-determination. The contributions of a number of writers on the subject are compared.—A. B. Herrig (Michigan Central State Teachers College).

3797. Wan, S. Chemical composition of bones of vegetarian and omnivorous rats. *Chinese J. Physiol.*, 1933, 7, No. 1, 23-34.—The composition of the bones of 48 omnivorous and 48 vegetarian rats was determined with regard to ash, carbon dioxide, calcium, and phosphorus. The rats used consisted of equal numbers of males and females, and ranged from 4 weeks to very old age. The author concluded that the bone of vegetarian rats was normally calcified and comparable to that of normal rats. There are 3 tables; Table III giving a summary of the chemical composition of bones of the vegetarian and normal rats under discussion.—C.-F. Wu (Nat. Res. Instit. Psychol., Shanghai, China).

3798. Werringloer, A. Die Sehorgane und Sehzentren der Dorylinen nebst Untersuchungen über die Facettenaugen der Formiciden. (Visual organs and centers in the Dorylini, with investigations of the facet eyes of the Formicidae.) *Zsch. f. wiss. Zool.*, 1932, 141, 432-524.—Normal and developmental microscopic anatomy of the eye and connecting nervous structures.—B. F. Skinner (Harvard).

3799. Závadský, K. Les statocystes des Amphipodes. (The statocysts of amphipods.) *Acad. Tchèque Sci. Bull.*, 1928, 29, 407-410. Also in: *Rozpravy České Akad. Věd. a Umění. Tr. 2*, 1928, 37, 1-20.—(*Biol. Abst.* VII: 8436).

[See also abstracts 3612, 3663, 3664, 3685, 3686, 3720, 3732, 3733.]

## EVOLUTION AND HEREDITY

3800. Anderson, C. The inheritance of the interest in surgery. *Eng. News*, 1931, 16, No. 10.—R. R. Willoughby (Clark).



3801. Creswell, R. The inheritance of botanical interests. *Eug. News*, 1932, 17, No. 1.—R. R. Willoughby (Clark).

3802. Fischer, M. Die Vererbung der Geisteskrankheiten. (The inheritance of mental afflictions.) Berlin: Metzner, 1931. Pp. 24. RM. 0.50.—An historical introduction sketches the work of Morel, Lombroso, Schüles and v. Kraft-Ebing. It was Mendel's discoveries, however, which established a reliable basis for systematic inquiry into the problems of inheritance, especially as regards mental diseases. The author presents an account of the principal types of inheritable afflictions and arranges them in the order of their probable inheritableness: epilepsy, weak-mindedness, difficult psychopathic irregularities. Without neglecting other forms, it is nevertheless clear from this that the steps taken by eugenicists and others interested in this field should be devoted primarily to an attack upon these most commonly inherited ailments.—M. Fischer (Berlin-Dahlem).

3803. Humm, D. G. Mental disorders in siblings. *Amer. J. Psychiat.*, 1932, 12, 239-283.—See VII: 563.—W. S. Hunter (Clark).

3804. Hurst, C. C. A genetical formula for the inheritance of intelligence in man. *Proc. Roy. Soc. London*, 112B, 80-97.—Intelligence is defined as "natural mental ability as expressed in general mental activities and achievements." A study is presented (1) of 194 Leicestershire families consisting of 388 parents and 812 offspring, all investigated by the writer, and (2) of the royal families of Europe, consisting of 212 families, with 424 parents and 558 offspring. The royal family data were collected from Woods' *Mental and Moral Heredity in Royalty*. Parents and offspring were graded for intelligence, on the ground of their general mental achievements, in 10 equal grades. Persons in grade 10 are called "illustrious," in grade 9 "eminent," in grade 8 "brilliant," in grade 7 "talented," in grade 6 "able," in grade 5 "mediocre," in grade 4 "dull," in grade 3 "subnormal," in grade 2 "moron," in grade 1 "imbecile." Equivalent juvenile ratings in terms of IQ were estimated at 20 IQ per grade, e.g. 200 IQ = grade 10, 100 IQ = grade 5, 20 IQ = grade 1. Grade 5 was the most frequent and the parents in this grade were found to be of three genetical types, *NN*, *Nn* and *nn*, in which *N* is a dominant gene for mediocre intelligence, and *nn* is a recessive pair of genes for abnormal variable intelligence, in which scheme any of the 10 grades of intelligence may be expressed. The 10 grades of intelligence are provisionally referred to the action of five pairs of minor genes *Aa* . . . . *Ee* in the presence of the major pair *nn*. The dominant minor genes *A* . . . . *E* act as equal and cumulative increasers of intelligence and the recessive minor genes *a* . . . . *e* act similarly as decreasers. In the presence of the dominant major gene *N* (*NN* or *Nn*) the minor genes *Aa* . . . . *Ee* are inactive. A genetical formula for the inheritance of intelligence may now be derived. It is hexagenic, involving one major and five minor pairs of genes. It has 729 genotypal forms, of which the most heterozygous form is [*Nn* + (*Aa*

+ *Bb* + *Cc* + *Dd* + *Ee*]. This genetical formula is said to fit the diverse data sufficiently well in a qualitative sense to be used as a working hypothesis for other families, on which it should be tested quantitatively on a large scale. The author therefore calls for organized and coordinated research on a very large scale.—F. C. Bartlett (Cambridge, England).

3805. Northrup, W. C. The inheritance of musical ability. *Eug. News*, 1931, 16, No. 10.—R. R. Willoughby (Clark).

3806. Popenoe, P. Heredity and mental deficiency. *Ment. Hygiene*, 1931, 15, No. 3.—R. R. Willoughby (Clark).

[See also abstracts 3627, 3954, 3958, 4012.]

## SPECIAL MENTAL CONDITIONS

3807. Altenburger, H., & Kroll, F. W. Suggestive Beeinflussung der Sensibilität. (The modification of sensitivity by suggestion.) *Zsch. ges. Neur. u. Psychiat.*, 1930, 124, 538-552.—(*Biol. Abst.* VII: 866).

3808. [Anon.] Gedanken-Übertragung während der Psychoanalyse? (Telepathy during a psychoanalysis?) *Psychoanal. Bewegung*, 1933, 5, 77-81.—A circumstance is cited in which a subject under psychoanalysis gave some evidence of telepathic comprehension, namely of an anxiety in the mind of the analyst. The author discusses the experience without reaching a conclusion, commenting on the necessity for observing many cases before definite belief can be reached.—A. B. Herrig (Michigan Central State Teachers College).

3809. Baudouin, C. A quelles conditions la vie intérieure est-elle féconde? (Under what conditions is the inner life fruitful?) *Psychol. et vie*, 1932, No. 7, 190-192.—It is necessary that the inner life be translated into action. Action is healthy only when ceaselessly controlled by the inner life; otherwise it becomes sterile agitation. Equilibrium consists in an unceasing exchange between the inner life and action, between the self and the world.—Math. H. Piéron (Sorbonne).

3810. Bergler, E. Psychoanalyse eines Falles von Prüfungsangst. (Psychoanalysis of a case of examination anxiety.) *Zentbl. f. Psychotherap.*, 1933, 6, 65-83.—The author reports the case of an unusually talented student, 27 years old, who after preparing for examinations, repeatedly delayed, for reasons not clear to himself, to come before the examining commission. A position which depended on passing the examinations awaited him and the family desperately needed his help. Analysis revealed that he unconsciously interpreted examinations as a continuation of his unresolved difficulties with his father and that they mobilized his masochistic-sadistic conflicts. As a court of justice, examinations appealed to his need of punishment. To pass them, however, would be a proof of manhood, which he renounced. Failure was a pretext for delaying heterosexual advancement, but also a way of revenging himself on his father. The various factors in the case are worked out thoroughly, with the aid of observations in the father's diary.

Through analysis the patient was freed from his symptoms and his personality matured.—*M. E. Morse* (Catonsville, Md.).

3811. **Bergler, E.** *Zur Psychologie des Zynikers.* (A contribution to the psychology of cynicism.) *Psychoanal. Bewegung*, 1933, 5, 130-166.—The author continues a previous article with discussion of various types of cynicism, enumerating sixty-two classifications. Each of these he illustrates and discusses. Cynicism seldom has a conscious motive, he states. It arises spontaneously, welling up from a sub-conscious background.—*A. B. Herrig* (Michigan Central State Teachers College).

3812. **Bogen, H., & Lipmann, O.** [Eds.] *Gang und Charakter.* (Gait and character.) *Beih., Zsch. f. ang. Psychol.*, 1931, No. 58. Pp. 122.—This is a series of twenty essays written for a contest conducted by the Erdal-Studiengesellschaft. In a foreword the editors explain that the purpose of the publication is the presentation of the problem of the relation between gait and character and of certain methodological principles for coöperative work in the field. These are individual views and not intended for uncritical use. The papers are arranged under the headings: (1) The characterological significance of the knowledge of gait. (2) Factors determining gait: environment, age, sex, occupation, clothing, etc. (3) Gait and character. Principles. (4) Characterological significance of individual features of walking. (5) Typology. A bibliography is included.—*H. Peak* (Yale).

3813. **Boven, W.** *La science du caractere. Essai de caracterologie generale.* (The science of character. Essay concerning general characterology.) Neuchatel, Paris: Delachaux & Nestle, 1931. Pp. 339.—To this author character is the total individual mental function, it is dynamic, it is a continued activity, the action and reaction between man and his environment. Nothing that is human can be neglected in understanding it: physiology, total psychology, the mental and physical pathology, race, constitution, sex, heredity and various external factors such as climate, nourishment and education all play a part. Each of these aspects is given a special chapter and the author examines the relationship between character and intelligence, methods of measurement and tests, and finally the pathology of character. The author proposes a theory of the structure of character. He says that there are three levels, resting one above another in the brain, which constitute successively the course of psychic development and run from the inferior vegetative functions to the highest faculties. In the first place there are the "dispositions," primitive attitudes which are the dynamic aspect of the sensations which come from the outside in and the outside out. These are unconscious and they are of three sorts: from the sense organs (exesthesias), from the viscera (endesthesias), and from the motor apparatus (amphiesthesias). Together they make up the total sensation (cenesthesia). Each of these three forms a basis for the higher functions, ideas, emotions and volitions in that order. On the second level are the

traits, conscious tendencies, collected and elaborated by a mechanism from above (the egocenter). They form the synthesis of the personality and self-esteem. With them the individual becomes a personality. Finally the third stage is made up by the group of higher functions directed by the intelligence and reason. Boven superposes upon Kretschmer's classifications three types: isothymes (well equilibrated), anisothymes (changeable dispositions, the cyclothymes of Kretschmer), and the dyssynthymes (the fragmented personality-schizothymes of Kretschmer).—*L. S. Selling* (Institute for Juvenile Research, Chicago).

3814. **Bragman, L. J.** *The case of Arthur Symons. The psychopathology of a man of letters.* *Brit. J. Med. Psychol.*, 1932, 12, 346-362.—"The so-called schizoid individual, with his restricted fields of interest, requires satisfaction from highly colored contrasts. . . . In this fashion a psychopathic literature complements a psychopathic personality."—*E. R. Hilgard* (Yale).

3815. **Britt, S. H.** *Examination of Miss Gene Dennis, "psychic."* *J. Appl. Psychol.*, 1932, 16, 691-694.—When given an opportunity to demonstrate mind-reading ability and "psychic powers," this examinee failed to give evidence of either.—*E. H. Kemp* (Clark).

3816. **Bromberg, W., & Schilder, P.** *Death and dying: a comparative study of the attitudes and mental reactions toward death and dying.* *Psychoanal. Rev.*, 1933, 20, 133-135.—70 normal individuals between 20 and 52, and 10 mental patients, were given a questionnaire of 32 questions regarding death. From the results of these and from psychoanalytic studies of individuals in whom death ideas were prominent, the following were the conclusions: Death has several meanings: (1) an escape from an unbearable situation; (2) death may mean a method to force others to give more affection than they are otherwise willing to grant; (3) to be killed may be an equivalent for the final sexual union in intercourse; (4) death may mean the final narcissistic perfection which grants lasting and unchallenged importance to the individual; (5) death gratifies the masochistic tendencies; (6) all libidinous instincts find an intensive expression in the idea of death. All libidinous roads lead to death and death thus becomes the perfect symbol of life.—*L. S. Selling* (Institute for Juvenile Research, Chicago).

3817. **Brunner, W.** *Messungen an einem Bewegungs-Apparat verglichen mit typischen Arbeitsgewohnungen.* (A comparison of measurements on a movement apparatus and typical work habits.) Zürich: Leemann, 1932. Pp. 96.—This study aims to establish certain determinations of character and personality by means of psychotechnical investigations. It was found that the characteristic traits of the different subjects did not vary despite marked changes in emotional condition as induced by the presented tasks. Two types of movement corresponding to two personality types were discovered. These were found to agree with the doctrine set forth by



Klages. Statistical treatment of the results was found to be inadequate unless to this the experimenter's own observations during the work periods were added.—*W. Brunner* (Zürich).

3818. Burt, H. E., & Gaskill, H. V. Suggestibility and the form of the question. *J. Appl. Psychol.*, 1932, 16, 358-373.—A moving-picture news reel was shown and the subjects questioned verbally about details in the picture. Six forms of question were used in order to evaluate the definite versus indefinite article, the negative versus the positive form, and the subjective versus the objective form. The questions were answered on a mimeographed blank by writing "Yes," "No," or "Don't know." The proportion of "Yes" answers was assumed to be an indication of suggestibility as affected by the form of the question. About 5000 answers to each form of question were available for analysis. The results for definite versus indefinite article are equivocal and no conclusions are warranted. There seems to be a tendency for the negative to cause greater suggestibility when categorical answers are demanded, and otherwise greater caution, but this trend is contradicted in the comparison of questions in the subjective form with the definite article. The objective form of question shows clearly a greater suggestibility and also a higher degree of caution.—*E. H. Kemp* (Clark).

3819. Codet, H. Traitement d'inspiration psychanalytique. (Treatment psychoanalytically inspired.) *Evolution psychiat.*, 1933, 3, 11-30.—The author discusses the application of the ideas which arise from the work of Freud, without going into psychoanalytical technique. Although the purpose of a well-conducted analysis is to dissociate and to put into play the greatest number of mechanisms and symbolic substitutions, and in a word, to go back as far and as exactly as possible to the root of the evil, the author, on the contrary, when consulted about persistent annoying symptoms, tries first of all to alleviate them and to make life possible by means of psychotherapeutic conversations.—*Math. H. Piéron* (Sorbonne).

3820. Cohn, M. Freud, Jung, Adler. Versuch einer ärztlich-philosophischen Würdigung ihrer Lehre. (Freud, Jung, Adler. An attempt at a medical-philosophical evaluation of their theories.) *Psychol. u. Med.*, 1932, 4, 301-330.—The major concepts of the three doctrines are considered with reference to the work of psychiatrists such as Breuer, Charcot, and Bleuler. The differences and similarities of these concepts as expounded by Freud, Jung, and Adler are also discussed.—*D. S. Oberlin* (Bryn Mawr).

3821. Dékány, S. Az emberi jellem alapformái. (The fundamental forms of human character.)—A critical discussion of the *Lebensformen* of Spranger. Three of his six fundamental types are not real worth-classes (*Wertträger, Wertklassen*); their foundation is not axiologic. There are three fundamental forms: the technical man, and two variants, viz., the economic man and the man of power (*Machtmensch*).—*P. Ranschburg* (Budapest).

3822. De Sanctis, S. Nuovi contributi alla psicofisiologia del sogno. (New contributions to the psycho-

physiology of dreams.) *Riv. di psicol.*, 1933, 20, 12-32.—The author considers the dream in relation to the physiology of the nervous system, to experimental psychology, to differential psychology, and to psychopathology; in fact, he considers it as a "psychic process" of general psychology. The author distinguishes superficial dreams and deep dreams as well as their possible physiological concomitants. He deals with dreams of criminals and of neuropaths, adding his own personal observations. He considers the possibilities of a linking-up between mystical and scientific theories of dreams.—*T. M. Abel* (Sarah Lawrence).

3823. Dopff, C. S. La importancia de l'autoestimacio. (The importance of self-evaluation.) *Rev. de psicol. i ped.*, 1933, 1, 62-67.—The term "individual values" is inclusive and neutral. It integrates emotional and intellectual elements, aptitudes, capacities, and somatic factors determining conduct. To attain self-evaluation, psycho-physiological and psychotechnical methods must be supplemented by introspection. With increasing age, self-evaluation becomes more difficult and is subject to enormous distortions. The difficulty lies not in discovering the truth, but in learning to break one's own bonds in order to profit by the knowledge. Although there are undoubtedly differences in capacities, aptitudes, and social and moral values, they cannot be arranged on a scale because of the great complexity of exogenous and endogenous factors. Adjustment occurs spontaneously. Environment may inflate personal valuation, especially in the intellectual field. In the internal life, self-appraisal conduces to the highest aspiration of the psychic life—serenity. The teaching of self-evaluation and self-determination is one of the most important tasks of the mental hygiene of childhood. In the adult, an ample field is afforded by the individual's experiences, particularly situations which offer the choice of active or passive reactions, also his relative position in homogeneous groups to which he belongs. Knowledge of one's own powers and of the factors in conscious and unconscious behavior helps technical and social training and increases the individual's possibilities for collective work.—*M. E. Morse* (Catonsville, Md.).

3824. Dresser, H. W. Knowing and helping people; a study of personal problems and psychological techniques. Boston: Beacon Press, 1933. Pp. 277. \$2.50.—*R. R. Willoughby* (Clark).

3825. Dugas, L. De l'illusion. Ce qu'elle a de volontaire et d'involontaire. (On illusion. What it has of the voluntary and of the involuntary.) *Psychol. et vie*, 1932, No. 9, 237-238.—Illusion is an error to which the mind agrees. It has a double aspect; it is arbitrary, since it is admitted without sufficient proofs, and in this way it is a voluntary act; it is, however, legitimate.—*Math. H. Piéron* (Sorbonne).

3826. Dwelshauvers, G. La vie intérieure. (The inner life.) *Psychol. et vie*, 1932, No. 7, 189-190.—*Math. H. Piéron* (Sorbonne).

3827. Edwards, K. H. R. Constitution and temperament. *Scientia*, 1933, 53, 272-284.—Attempts to solve the relation of constitution and temperament have been directed toward one or another of the following approaches: the genetic, teleological, psychological, and psychopathological. Genetically, within each species occurs a series of variants of inherited difficulties. Concentration of the various forms of temperamental endowment occurs within social classes and localities. The same forces operate in the development of the constitution. The teleological viewpoint has prevented the undue stressing of individual existence and brought to the fore the external forces acting upon it. The physiological approach reveals that temperament expression together with the development of the physique run in parallel lines in children, the relations being altered by adolescence and maturity in marriage. The relationship here is still a matter of controversy. The psychopathological approach has given rise to new classifications. Much has been learned through this approach. The psychologist and eugenicist must be able to control and develop the constitution and temperamental qualities some time in the future.—L. S. Selling (Institute for Juvenile Research, Chicago).

3828. Edwards, K. H. R. The rating of temperamental qualities. *J. Appl. Psychol.*, 1932, 16, 398-402.—By means of a group rating method it was shown that temperamental qualities can be graduated in an arithmetical series which is in accordance with the definition of temperament given by Klages. The distribution of traits will vary from individual to individual, as will the sum total of ratings, but in each case graduation occurs. Further, the practice of self-rating is obviated together with its personal factor.—E. H. Kemp (Clark).

3829. Emerson, L. E. Emerson and Freud: a study in contrasts. *Psychoanal. Rev.*, 1933, 20, 208-214.—The contrast between Emerson and Freud is between their methods and material, not their purposes. The essence of Freud's theory of dreams is found in some of Emerson's work. Emerson and Freud both considered psychotherapy, death, and analysis. Both felt the necessity for renunciation.—L. S. Selling (Institute for Juvenile Research, Chicago).

3830. Ewald, G. Biologische und "reine" Psychologie im Persönlichkeitsaufbau. Prinzipielles und Paralleles. (Biological psychology and "pure" psychology in relation to the structure of personality. Principles and parallels.) Berlin: Karger, 1932. Pp. 138. RM. 14.40.—This book is a continuation and enlargement of the author's studies in the biological foundations of temperament and character. Following a brief sketch and defense of this earlier work, it is shown that the viewpoint here maintained is in agreement (1) with the modern doctrines of psychiatry in so far as these deal with the basic characteristics of spiritual life (*Seelenleben*), and (2) with the doctrine of personality as set forth in Spranger's *Lebensformen*. From its emphasis upon biology the book also contributes a somatic aspect to

individual psychology: viz., the primary drives of desire for power on the one hand and the feeling of subservience on the other are found to be grounded, respectively, in the energetic and the "reactive" temperaments. The book closes with a critical evaluation of Freudianism. It finds no reason for disharmony between the "somatist" (*Somatiker*), with his emphasis upon causality, and the *Psychoiker*, whose thinking is primarily teleological.—G. Ewald (Erlangen).

3831. Fenichel, O. Outline of clinical psychoanalysis. *Psychoanal. Quar.*, 1933, 2, 94-122.—(Fourth instalment, Chapter V.) Preenatal conversion neuroses. Stuttering represents infantile sexuality of anal-sadistic type, often distorted regression of Oedipus complex. Speech is equated with defecation and stuttering with play with feces. Failure of speech signifies hostile or death wishes and a regression to infantile state of speech omnipotence. Other components of the neurosis are Oedipal, castration, phallic tendencies, and exhibitionism. Oral fixation is an additional precondition. Gains may be super-ego bribery, pity, spite expression. Prognosis is difficult because of deep narcissism and variety of neurotic structures. Bronchial asthma, like stuttering, may be a neurosis. Analysis reveals regressions interpolated between Oedipus complex and conversions on anal-sadistic level which may become narcissistic. Archaic anality and orality dominate respiratory erotism, resulting in breathing sexualization. Asthma resembles stuttering. There is a discussion of olfactory erotism and its relation to respiration. Castration components are discussed and the relationships of anxiety feelings. The whole underlying structure appears pregenital. A third form of pregenital conversion is psychogenic tic. The mental life of ticqueurs is characterized by well-defined anal character and marked narcissistic make-up. Usually a tic is substitute masturbation resulting from repression and displacement. Tics resemble catatonic stereotypies. Prognosis for cure depends on underlying structure, with hysterical and compulsive forms most amenable.—M. H. Erickson (Worcester State Hospital).

3832. Fischer, M. Einer der ersten Vorkämpfer gegen den Alkoholismus in Deutschland. (One of the first combatants of alcoholism in Germany.) *Zsch. f. psych. Hygiene*, 1933, 6, 38-40.—C. F. W. Roller (1802-1878), distinguished psychiatrist and organizer of the system of care for mental patients in Baden, occupied himself extensively with the problem of alcoholism, both in Germany and in other countries. In 1874 he published in his *Psychiatrische Zeitfragen* the first comprehensive program for fighting alcoholism in Germany. This embodied the humane and social viewpoints and called for the coöperation of the public, the press, courts, clergy, and above all, the medical profession. Although he did not live to see his ideas carried out, they were adopted by the German Society for Combating Alcoholism when it was founded in 1883.—M. E. Morse (Catonville, Md.).



3833. Flournoy, H. *Der wissenschaftliche Charakter der Psychoanalyse.* (The scientific character of psychoanalysis.) *Psychoanal. Bewegung*, 1933, 5, 1-18.—Freud's especial contribution lies in the discovery of laws, a synthetic study. His studies are of the ontogenic character and reduce variabilities to classes. Psychoanalysis is not metaphysics, but an empirical science. It admits the psychic, but in positing conscience is doing nothing more than the physicist does when he posits electrons, and the chemist when he posits atoms. The technique of psychoanalysis leads from theory to hypothesis, through observation to discovery of principles, i.e., it is the technique of all science. The individual is a psychobiological entity, and the study of the psychic is a fundamental science.—A. B. Herrig (Michigan Central State Teachers College).

3834. Frank, J. *Psychoanalyse und Psychiatrie.* *Samml. psychoanal. Aufsätze*, 1932, 99-102.—Before Freud's era clinical psychiatry was a purely descriptive and registering science. The functions of the psychiatrist were limited to administrative duties and the collection of statistics on genetic biology. At present, psychoanalytic conceptions have become the common property of psychiatrists; they are "immanent in our collective preconsciousness." An understanding of psychopathological phenomena is not to be expected from a psychology of consciousness.—M. E. Morse (Catonsville, Md.).

3835. Freud, S. *The interpretation of dreams.* (Trans. by A. A. Brill.) New York: Macmillan, 1933. Pp. 600. \$5.00.—This translation from the eighth German edition is advertised as a new edition completely revised, but an author's preface dated 1931 states that it is essentially unaltered; in the absence of careful collation it appears that the terminology and bibliography have been brought up to date and occasional phrasing altered.—R. R. Willoughby (Clark).

3836. Garma, A. *La transferencia afectiva en el psicoanálisis.* (Affective transference in psychoanalysis.) *Arch. de neurobiol.*, 1931, 11, 266-272.—A. B. Hunter (Clark).

3837. Gyllensvärd, N. *Experimentella undersökningar över avertinnarkos.* (Experimental investigations on avertin narcosis.) *Svensk. läkart.*, 1933, 30, 283-295.—After giving a general discussion of avertin, Gyllensvärd reports on some experimental investigations of avertin narcosis and presents data, including three charts on individual rabbits, showing the different effects of varying amounts of avertin on certain reflexes, using these reflexes to measure the depths of narcosis. The stimuli used were: touching the cornea, flashing a light in the eye, striking the table, pinching the extremities, pulling the peritoneum.—M. L. Reymert (Mooseheart Laboratory for Child Research).

3838. Hendrick, I. *Pregenital anxiety in a passive feminine character.* *Psychoanal. Quar.*, 1933, 2, 68-93.—An analysis of one male patient typically feminine in type discloses "those two ontogenetic features Freud declares to be characteristic of normal

female development: a pre-*Œdipal* determination of character and a duplication in the later father cathexis of the original attitude to the mother." The patient's neurosis was pre-conditioned at the early "masculine" phase described by Freud for the female and was characterized by ego-accepted fantasies of passive narcissistic gratification, ego-rejected fantasies of pregenital (chiefly oral) aggression, and castration anxieties. Two decisive conflicts were present, an *Œdipus* conflict and an "early phallic" pre-*Œdipal* conflict.—M. H. Erickson (Worcester State Hospital).

3839. Heuyer, G., & Morgenstern, S. *La psychanalyse et son rôle dans l'hygiène mentale.* (Psychoanalysis and its rôle in mental hygiene.) *Encéph.*, 1932, 28, 227-230.—Psychoanalysis ought not to be used in all normal cases; it should be used as a therapeutic method, and reserved for the neurotic child, the child who presents character defects. In numerous cases, psychoanalysis has been used to explain affective conflicts at the root of certain infantile neuroses, and certain delinquent or criminal reactions of the child.—Math. H. Piéron (Sorbonne).

3840. Hitschmann, E. *Johannes Brahms und die Frauen.* (Johannes Brahms and women.) *Psychoanal. Bewegung*, 1933, 5, 97-129.—A character diagnosis of the musician Brahms is given. The circumstances of his life are reviewed, dwelling upon his friendship with Robert and Clara Schumann, his love of women, the loneliness of his unmarried life, his extreme isolation from all but a few, and his passion for music as his only means of self-expression. The author seeks to discover the reasons for Brahms' refusing to enter upon the married relationship, perhaps a combination of inferiority feeling and mother-fixation, and a castration complex. Many biographies are quoted. A bibliography accompanies the article.—A. B. Herrig (Michigan Central State Teachers College).

3841. Israeli, N. *Wishes concerning improbable future events: reactions to the future.* *J. Appl. Psychol.*, 1932, 16, 584-588.—This experiment treats of wishes concerning future events assumed to be improbable. Subjects stated for each of ten given situations three important things which they wanted to see happen but which they were certain would never happen. For the various groups of subjects, the greatest convergence of opinion was obtained for international affairs. The author thinks that "through a study of Utopian wishes regarded commonly as beyond realization, social and individual time perspective limits may be measured."—E. H. Kemp (Clark).

3842. Kleitman, N. *Studies on the physiology of sleep. VIII. Diurnal variation in performance.* *Amer. J. Physiol.*, 1933, 104, 449-456.—"There is a diurnal variation in the speed and accuracy of performance in man, with a maximum in the afternoon and minima early in the morning and late at night. This variation, like that in body temperature and urinary excretion of phosphates, may be due to a diurnal rhythm in the tonicity of the skeletal musculature, which is probably responsible for the development and per-

sistence of the diurnal sleep habit."—C. Landis (N. Y. Psychiatric Institute).

3843. Kleitman, N., & Doktorsky, A. Studies of the physiology of sleep. VII. The effect of the position of the body and of sleep on rectal temperature in man. *Amer. J. Physiol.*, 1933, 104, 340-343.—"Assumption of the horizontal position by man generally leads to a fall in body temperature. The onset of sleep tends to accentuate the downward trend of the temperature preceding sleep. Awakening is not characteristically followed by a change in body temperature. Lying down after standing invariably leads to a marked fall in body temperature, and the opposite is true if this procedure is reversed."—C. Landis (N. Y. Psychiatric Institute).

3844. Kroh, O., Lamparter, P., & Lamparter, H. Experimentelle Beiträge zur Typenkunde. Band III. (Experimental contributions to typology. Vol. III.) *Zsch. f. Psychol.*, 1932, suppl. vol. 22. Pp. xvi + 356. RM. 24.00.—Whereas the first volume of Kroh's series on typology (1929) dealt with the relationship between functional type and such elementary processes as the apprehension of form and color, the present volume, which precedes Vol. II, involves the application of Kroh's typology to the artistic field. The basis of the experiments reported is the distinction, current within Kroh's group, between those who attend primarily to form and those who attend primarily to color (*Form- und Farbbeachter*). Paul Lamparter, in Part I, presents the results of a study of the musical characteristics of these two types, based on tests of the apprehension and production of melody, rhythm and harmony; and Hans Lamparter in Part II reports an analogous study of their characteristic differences in type of pictorial representation. Both investigators find typical differences in the artistic field, corresponding to type of color-form reaction, and both suggest that the latter test may be of diagnostic significance in revealing the presence of more fundamental and more comprehensive personality types.—R. B. MacLeod (Cornell).

3845. Krout, M. H. Major aspects of personality. Chicago: College Press, 1933. Pp. xviii + 364.—This is not so much a textbook as an advanced critical outline of all of the aspects of significance in the study of personality. Chapters deal with race and culture; culture and the individual, individual heredity; the individual as an organism; the organism and its behavior; conditioned behavior; conscious and non-conscious behavior; behavior in its symbolic forms; symbolism and personality; development of personality; personality and behavior; and outlines for the study of personality. Appendices provide questions and problems, notes, and a bibliography for each chapter separately. The outline chapter should be of value to clinicians. The author's approach is basically Freudian, although with qualifications. The general outline is divided into the developmental study of the personality (ecological, biological, cultural, pre-natal, natal, early and later post-natal); the situational study of the personality (medical-laboratory, medical-clinical, physiological-laboratory,

and psycho-clinical); and the final summary and diagnosis. The detail of this outline occupies 30 pages. Each chapter is followed by a comprehensive restatement to facilitate reading. There are five pages of illustrations of the symbolic behavior of the various symbolic groups: the oral, the anal, the genital, the fantasy, and the motor.—O. L. Harvey (Boston).

3846. Laird, D. A survey of the sleep habits of 509 men of distinction. *Amer. Med.*, 1931, 26, 271-275.—(*Biol. Abst.* VI: 18633).

3847. La Ravoire, J. Faut-il perdre ses illusions? (Must one lose one's illusions?) *Psychol. et vie*, 1932, No. 9, 238-239.—*Math. H. Piéron* (Sorbonne).

3848. Lewin, B. D. The body as phallus. *Psychoanal. Quar.*, 1933, 2, 24-47.—The author describes and discusses examples of the unconscious equation body equals phallus, mouth equals urethra. He concludes that this "fantasy is a passive counterpart of the fantasy of eating the penis and represents an identification of body with penis." The dominant sexual aim of this is to be eaten, which is equivalent to the castration fantasy, and such a fantasy is of the post-phallic type of libidinal organization. Other sexual aims manifested were equivalent to fore-pleasure. The fantasy varies in type as to the role played by one's own body or penis or another's body or penis.—M. H. Erickson (Worcester State Hospital).

3849. Lorand, S. [Ed.] Psychoanalysis today, its scope and function. New York: 1933. Covici Friede. Pp. xv + 370. \$3.00.—The essays in this volume provide some indication of the extent to which psychoanalysis has permeated different fields of science and life. The volume is divided into four major parts: general theoretical; mental hygiene and education; nervous and psychic ailments; and applied psychoanalysis in other fields. The essays themselves are as follows: Freud's influence on medicine (Ferenczi); Development of the ego-psychology (Alexander); Dream mechanisms and interpretations (M. A. Meyer); Theoretical basis of psychoanalytic therapy (Nunberg); Character formation and psychoanalysis (Lorand); Development of mental hygiene (F. Williams); Sexuality and its role in the neuroses (Brill); Child-parent relationship (Oberndorf); Understanding the problem child (Broadwin); The early development of conscience in the child (M. Klein); Prevention of nervous and mental disease in childhood (Ames); The meaning of neurosis and psychosis (Schilder); Pathological character formation: the neurotic character (Glover); Hysterias and phobias (Kardiner); Obsessional neuroses (B. D. Lewin); Manic-depressive psychoses (Zilboorg); Schizophrenias (Laforgue); Paranoia (Hinsie); Psychoanalysis of organic psychoses (Van Ophuijsen); Psychotherapy and psychoanalysis (Bunker); Psychoanalysis and internal medicine (S. E. Jelliffe); Psychoanalysis and anthropology (G. Róheim); Psychoanalysis and the psychology of religion (E. Jones); Psychoanalysis and literature (Wittels); and Psychoanalysis and criminology (Schilder).—O. L. Harvey (Boston).



3850. Lorand, S. The psychology of nudism. *Psychoanal. Rev.*, 1933, 20, 197-207.—The dynamics of nudism can be traced back to the exhibitionistic and scopophilic (voyeur) instincts. These instincts are due to strong castration anxiety, so the reason for exhibitionism in the male is the constant need for denying castration anxiety. In the female, other parts of the body are substitutes for the phallus in the exhibitionistic and scopophilic tendencies. The components of guilt are present in nudism. The bathing suit or its absence cannot be considered a criterion in the solution of neurosis or sexual problems. There is no reason to believe that nudism per se is beneficial for a child.—L. S. Selling (Institute for Juvenile Research, Chicago).

3851. Maier, B. Ueber Haltlosigkeit. (Instability.) *Zentbl. f. Psychotherap.*, 1933, 6, 83-88.—Stability is a complex attribute of the mature personality. Maier discusses the causes and characteristics of instability, which depend on the psychology of the instincts and the will. It may exist in persons both with weak and with strong instincts. The educational and psychotherapeutic treatment of the two types is quite different. Those with weak instincts, who are often of the asthenic type, are also weak-willed, since the instincts give the will its driving force. The treatment of this type is psychagogic (Kronfeld), with an approach to the psychic through the physical. In persons with strong instincts, the origin of instability is frequently a combination of an arrested instinctive life with a weak will; in other cases, the "primitive reaction" is characteristic of the instinctive personality, i.e., an immediate transformation of impulses into action without intervening counter-forces or choice. The treatment of this type is to strengthen the will, i.e. the disposition to inhibition. As to prognosis: in many, although not all unstable adolescents, improvement occurs on a purely biological basis with increasing maturity. Furthermore, many unstable persons learn to assume an external stability, although their inner attitude remains unchanged. Maier reports two cases of psychopathic adolescents of the contrasting types with weak and strong instincts. A German bibliography is given.—M. E. Morse (Catonsville, Md.).

3852. Maller, J. B. Studies in character and personality in German psychological literature. *Psychol. Bull.*, 1933, 30, 209-232.—A summary is made of 236 titles, under the following headings: testing devices, etc.—those involving behavior, those for affective phases, moral knowledge and attitudes, questionnaires, observations; studies in development of character and personality—education, teaching morals, sex education, religion; personality adjustment of the individual—emotions, emotional disturbance; social aspects—social relationship, delinquency; types of character—descriptive, psychological, constitutional; general discussions. The trend in German literature is contrasted with that in American, as dealing with the individual in his social adjustments more than with specific situations and elements, and as revealing the prevalence of logical and philo-

sophical analysis rather than statistical treatments.—J. F. Dashiell (North Carolina).

3853. McFarland, R. A. The psychological effects of oxygen deprivation (anoxemia) on human behavior. *Arch. of Psychol.*, 1932, No. 145. Pp. 135.—The object was to study certain basic psychological processes in human behavior under reduced oxygen conditions. The literature was carefully reviewed and a bibliography of 191 items is appended. Preliminary experiments were made on nine subjects (Experiment I). In Experiment II the gas mixtures were inhaled from a 1000-liter Douglas bag so that the percentages could be kept constant. There were 5 subjects, who took tests of simple and choice reactions, pursuit meter, form boards, and Guidit. Tests were given under normal conditions and then with mixtures of 11.4% O<sub>2</sub>, corresponding to 17,000 feet altitude. At each succeeding experimental hour the O<sub>2</sub> percentage was altered from 2000 to 3000 feet higher, and where the subject was able to withstand it, up to 7.55% O<sub>2</sub>, or 28,500 feet altitude. In Experiment III an attempt was made to study the choice reaction to a series of lights. The following are some of the conclusions tentatively drawn: Simple sensory and motor responses are not seriously impaired until the subject approaches collapse from O<sub>2</sub> want, and then the loss appears to be fairly sudden. The choice reactions appear to be impaired at higher percentages of O<sub>2</sub> than the simple reactions. Loss of memory is as low as 9.05% in the average subject. The closer relationship between an inadequate O<sub>2</sub> supply and loss of muscular control and accentuated fatigue is clearly demonstrated. The results indicate clearly that personality is in the final analysis dependent upon certain physiochemical processes, and that more profound knowledge may be obtained by combining psychological and bio-chemical research.—E. M. Achilles (Columbia).

3854. Omwake, K. T. Effect of varying periods of sleep on nervous stability. *J. Appl. Psychol.*, 1932, 16, 623-643.—Tests were made on five subjects after varying periods of sleep. The Moss Wabblemeter Test was used. A close relation was found to exist between length of previous sleep period and nervous stability. Nervous stability is far less after two hours of sleep than at bedtime after a strenuous day. Nervous stability increases with increasing amounts of sleep. It is found to be at a maximum in the early afternoon, a warming-up period evidently being essential to greatest efficiency.—E. H. Kemp (Clark).

3855. Pezold, H. v. Zur Onanie-Frage. (Concerning masturbation.) *Zsch. f. psych. Hygiene*, 1933, 6, 20-30.—This problem has been important since the time of Moses. There are four epochs which can be noted in the history of masturbation. The first one is the Biblical period, the second the early historical period, and the third the later Church period, which is shown chiefly by the work of Tissot. The last period is the modern period, which is to be considered largely from the Freudian standpoint. Much can be found in the medical and pedagogical literature concerning this subject. Little can be determined by means of

statistics. Masturbation is a phenomenon which can be found in all races and even among animals. The chief harm connected with it is the guilt feeling attached to it, and there are various treatments which can be utilized, physical and mental.—*L. S. Selling* (Institute for Juvenile Research, Chicago).

3856. Pini, L. G. *Come si rideva in antico. Burle, stravaganze, facezie di Toscani d'altri tempe.* (How people used to laugh. The humor, extravagant expressions, and wit of the Tuscans of former times.) Milan: Hoepli, 1932. Pp. xi + 346.—The book is a collection of short narrations and of humorous expressions, arranged in several chapters for reasons of argument and imbued with the humor of the author. To these humorous sayings, which reflect the epochs and people from 1300 to 1700 and which open up considerations and philosophical comparisons regarding humor (particularly the chapter *An Old Master of Humor, the Curé Arlotto*), the author promises to add another volume later: How people have recently laughed.—*V. D'Agostino* (Turin).

3857. Rele, V. G. *The mysterious Kundalini. The physical basis of the "Kundali (Hatha) Yoga" in terms of western anatomy and physiology.* Bombay: Taraporevala Sons & Co., 1931. Pp. 81. Rs. 3/8.—(*Biol. Abst.* VII: 3230).

3858. "Research Officer." *Illustrations of illegitimate types of controversy.* *Bull.* 19, *Boston Soc. Psych. Res.*, 45-65.—A plea to psychic researchers throughout the world to demand civilized modes of discussion, and to frown upon personal assaults unless accompanied by full proof, and upon insinuations, innuendoes, gossip, garbling and the like as controversial weapons. The Research Officer declares that these are used mostly in relation to mediumistic physical claims and especially, though not exclusively, by defenders of the same. He gives titles to fourteen "types" and cites actual examples, drawn from recent controversial literature, of each type named. Readers are asked to demand discussion of evidence and issues involved, and the abandonment for the most part of seer-like pretension to ability to gauge the souls of opponents and to perform solitary psychoanalysis.—*W. F. Prince* (Boston).

3859. "Research Officer." "Impossible" and "supernormal." *Bull.* 19, *Boston Soc. Psych. Res.*, 4-39.—The first part of this paper shows the extreme danger of declaring that a given mechanical effect is impossible. The writer asked a large number of people, scientific and other, whether, if one grasps the diagonally opposite corners of a handkerchief with thumb and first finger of each hand, respectively, there is any way by which, without lifting or shifting either thumb or finger, a real overhand knot involving the whole breadth of the handkerchief may be produced between the hands. In face of the chorus of No's, the method is indicated, and then a moral drawn in reference to the mechanical effects seen in mediumistic physical phenomena. No general denial is pronounced, but some fifty historical cases are cited wherein "impossible" was said, yet fraud proved. There is added an appeal to psychic researchers to

demand in such cases a rational procedure and to refuse meekly to be ruled by alleged "psychic laws" which make such a procedure impossible. The second part of the paper discusses the word "supernormal," which has only a provisional meaning but which many are erroneously interpreting as equivalent to the discarded word "supernatural."—*W. F. Prince* (Boston).

3860. Roback, A. A. *Self-consciousness and its treatment.* Cambridge: Sci-Art Publishers, 1933. Pp. 122. \$1.50.—Self-consciousness is the preoccupation with one's own personality to such an extent as to suppose that one is the object of observation by others. The symptoms of self-consciousness are hesitation of movement, blushing, speech changes, change in pitch of the voice, loss of naturalness in posture or carriage, and perspiration. The mechanism is an interference with organic working of an act. It is linked up with fear, and its physiological locus is probably the optic thalamus. Introverted, inexperienced, melancholic, schizothymic people are most self-conscious. A number of cases of famous people who are self-conscious have been found. There are eight criteria to distinguish morbid self-consciousness from ordinary self-consciousness. They are physical, environmental, and other causes. A ratio of ambition to achievement gives the degree of self-consciousness. The subject is discussed from the angle of heredity, Adlerian and Freudian psychology, dynamic psychology, and endocrinology. The handicaps of the self-conscious in daily life are pointed out. The treatment consists in obtaining sufficient achievement, mixing more with people, adaptation of a spontaneous attitude, firm belief in one's message, picking out flaws in others, and general hygienic measures. It is to be hoped that an experimental psychology of self-consciousness will be developed.—*L. S. Selling* (Institute for Juvenile Research, Chicago.)

3861. Sachs, B. *Bumke's critique of psychoanalysis.* *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

3862. Sageret, J. *Perdons notre illusion sur nos illusions.* (Let us lose our illusion about our illusions.) *Psychol. et vie*, 1932, No. 9, 240-241.—The first of our illusions which we must suppress is that which we entertain about our illusions. They are, in fact, errors of diagnosis or prognosis, which do not deserve special treatment, or they are purely sentimental impulses, from which it is necessary to abstract the most possible ones in order to see the realities and move among them.—*Math. H. Piéron* (Sorbonne).

3863. Salmon, A. *La fisiopatologia del sonno.* (The physiopathology of sleep.) Bologna: Cappelli, 1930. Pp. 211. 30 L.—(*Biol. Abst.* VI: 18651).

3864. Salmon, A. *Le sommeil est-il déterminé par l'excitation d'un centre hypnotique ou par la dépression fonctionnelle d'un centre de la veille?* (Is sleep determined by the excitation of a hypnic center, or by the functional depression of a center of waking?) *Rev. neur.*, 1932, 39 (1), 714-720.—The author declares the hypothesis that waking and sleep are regulated by the activity of the infundibulo-tuberian



nucleus to be legitimate. Sleep, which constitutes an active process of repair of the nerve cells, is only the suspension of the waking state, and can be explained by the functional depression of a waking center. This would be the infundibulo-tuberian nuclei, the principal regulatory centers of sleep, which would constitute this center of waking. There are also sympathetic nuclei. Waking is characteristic of sympathicotomy, as sleep is characterized by a sympathetic depression, and by the relative accentuation of the vagal tonus. These considerations allow the hypothesis that these infundibulo-tuberian nuclei constitute sympathetic centers activating waking, and that sleep is allied to the functional depression of these nuclei.—*Math. H. Piéron* (Sorbonne).

3865. Sch., F. *Kleine Profits*. (Small profits.) *Psychoanal. Bewegung*, 1933, 5, 70-76.—Charles Odier has written on the relationship between money and neuroses. The author comments on this thesis and gives a number of cases, with psychoanalytical explanations.—*A. B. Herrig* (Michigan Central State Teachers College).

3866. Schrenck-Notzing, A. v. *The development of occultism into parapsychology in Germany*. *J. Amer. Soc. Psych. Res.*, 1933, 27, 76-87.—This, the fifth in a series of articles by the late author, continues to outline the evolution of claims in behalf, particularly, of mediumistic physical phenomena and to furnish bibliographic data. For these, the intended, purposes it is useful. For any critical discussion of the cases themselves one must resort to earlier or later documents. The author pays little attention to adverse criticism, although several of the mediums named have been reported as "exposed," for the most part by their earlier advocates.—*W. F. Prince* (Boston).

3867. Slabihoudek, K. *Der Freudismus und der Mensch*. (Freudism and mankind.) *Samml. psychoanal. Aufsätze*, 1932, 89-99.—The author considers the rise of Freudism as a resurrection of the introvert in contrast to the extrovert, and as a dynamic philosophy which looks at life and even disease as a phenomenon, as distinguished from a static viewpoint. The neuroses are rooted in a conflict between our unconscious wishes and civilization. A true direction of life lies in maintaining a healthy proportion between the two forces. This conflict creates positive achievements in science, art and religion. Freud appears to be a rationalist, a materialist and a determinist. We believe in free will, but in reality are driven by the unconscious. The function of Freudism is not, however, the fabrication of life philosophies; it is a method of psychological research.—*M. E. Morse* (Catonsville, Md.).

3868. Solbrig, — *Zum 50jährigen Jubiläum des Deutschen Vereins gegen den Alkoholismus*. (Celebration of the fiftieth anniversary of the founding of the German Society for Combating Alcoholism.) *Zsch. f. psych. Hygiene*, 1933, 6, 34-38.—The author reviews the history, achievements and current activities of the Society. The last have regressed in many fields, owing to economic conditions. Since the war,

the use of alcohol has greatly increased in Germany, the number of alcoholics in institutions has risen, and accidents and crimes associated with alcohol are very frequent. The Society has 41,000 members.—*M. E. Morse* (Catonsville, Md.).

3869. Stagner, R. *The intercorrelation of some standardized personality tests*. *J. Appl. Psychol.*, 1932, 16, 453-465.—Intercorrelations, measures of central tendency, and variability are presented for six objective personality tests. The correlations are mostly low, and the cases of high relationship are usually those in which the tests contain identical elements. Some suggestions are made as to the possible improvement of personality tests.—*E. H. Kemp* (Clark).

3870. Sterba, R. *Freuds "Neue Folge der Vorlesungen zur Einführung in die Psychoanalyse"*. (Freud's "New sequence of lectures for introduction to psychoanalysis.") *Psychoanal. Bewegung*, 1933, 5, 187-196.—A comment and analysis of Freud's new book, which is both a continuation and a revision of his earlier work. Chapters on *Dream Study*, *Dream and Occultism*, *Analysis of the Psychic Personality*, and *Female Development* deserve comment. He has given a clearer explanation of the *Ich* and *Es* of his previous work, and explains the place of conscience. In his chapter *Explanation, Application, Orientation* he shows the place of psychoanalysis and warns against ignorant use of it and over-emphasis. The work shows a thoughtful reevaluation of his contribution.—*A. B. Herrig* (Michigan Central State Teachers College).

3871. Tabori, J. *Zur Kasuistik des induzierten Morphinismus*. (A discussion of induced morphine addiction.) *Zentbl. f. Psychotherap.*, 1933, 6, 88-96.—Tabori describes the rise of morphine addiction in Europe; discusses the psychology of both narcotic and alcoholic intoxication; and reports a case of induced conjugal morphinism to demonstrate the enormous importance of exogenous etiology in contrast to psychopathic inferiority, generally considered the decisive factor. Narcotic addicts are persons disillusioned especially in love, because their ideal is unattainable. Morphine seems to bring the ideal near; hence the libido becomes fixed on the drug as a substitute satisfaction. Every case also has anti-social sado-masochistic and homosexual components. Addiction represses these both by paralyzing the person temporarily and because they are lived out unconsciously during intoxication and are thus temporarily discharged. For this reason, alcoholism has almost never been successfully combated; it narcotizes other excitations, more dangerous socially. The addict progresses from an asocial to an antisocial being. The addict is essentially a chronic suicide; through proselytism he becomes a chronic murderer. Proselytism both strengthens his position as an addict and lessens his feeling of inferiority. Induced morphinism is best studied in cases of conjugal addiction in which a habituated partner seduces a non-psychopathic one. Resistance eventually succumbs to repeated experiences, even in the presence of disgust.

In even the most desperate induced cases, the psychogenic disposition can be permanently banished by appropriate therapy. Cure is never achieved by withdrawal treatment alone; the latter must be combined with psychotherapy. The addict must discover what pleasures he is trying to find through the drug, and must learn to renounce these as unattainable.—*M. E. Morse* (Catonsville, Md.).

3872. Thom, D. A. Habits: their formation, their value, their danger. *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

3873. Thurnwald, R. The social function of personality. *Sociol. & Soc. Res.*, 1933, 17, 203-218.—An attempt is made to relate the formation and the function of aggregations of people to the forces developed by individuals, and to show how, by interaction, the life of a social unit may be maintained or destroyed. "Individualistic" and "collectivistic" societies cannot be opposed; individualistic and collectivistic traits exist in every society but are apportioned differently in each.—*J. R. Hilgard* (Yale).

3874. Urbantschitsch, R. Psychoanalysis for all. Boston: Bruce Humphries, 1933. Pp. 63. \$1.25.—*R. R. Willoughby* (Clark).

3875. Wolter, K. K. Das seelische Moment beim Sterben durch elektrischen Strom. (The psychic element in death from the electric current.) *Psychol. Rundschau*, 1933, 4, 241-245.—Four types of death from electric shock are to be recognized, the immediate, the retarded, the interrupted, the belated. These the author describes, then discusses the phenomenon of resistance to the electric current caused by expectation of it. In no other type of death does the psychic play so large a part.—*A. B. Herrig* (Michigan Central State Teachers College).

3876. Zillboorg, G. Anxiety without affect. *Psychoanal. Quar.*, 1933, 2, 48-67.—The author discusses the case of a clinical reproduction of the type of anxiety assumed by Freud to be a birth anxiety, attached in this instance to a childhood incident. The patient escaped from the anxiety by de-vitalizing and rejecting its chief and secondary contents with the exception of physiological manifestations, particularly the cardiac and respiratory components of anxiety. The whole situation appeared to be a temporary total regression to the primitive state where all stimuli are undifferentiated, giving rise to tensions dealt with only by primitive cardiovascular and respiratory responses. There follows a discussion of the relationship to schizophrenic behavior, particularly catatonic stupors.—*M. H. Erickson* (Worcester State Hospital).

[See also abstracts 3621, 3642, 3645, 3700, 3730, 3751, 3780, 3884, 3925, 3967, 3981, 4002, 4019, 4049, 4053, 4054, 4143.]

#### NERVOUS AND MENTAL DISORDERS

3877. Abély, X., & Abély, P. L'affectivité dans la démence précoce. (Affectivity in dementia praecox.) *Ann. méd.-psychol.*, 1932, 90, 511-532.—The following topics are considered: (1) Description of the

feelings in dementia praecox. (2) Dynamic dissociation. (3) Static dissociation. (4) The affective formula of dementia praecox. (5) Relations between intelligence and affectivity.—*H. W. Karn* (Clark).

3878. Anderson, E. W. A study of the sexual life in psychoses associated with childbirth. *J. Ment. Sci.*, 1933, 79, 137-149.—Fifty such cases were compared with fifty cases of psychosis in married women of approximately the same age period where the puerperium was not the precipitating factor. No material differences were revealed in the pre-psychotic sexual life of the two groups. Neither persistent frigidity, masturbation nor eroticism was found to be a distinctive feature of the puerperal group. The attitude to both husband and child in puerperal psychosis is inconstant, and aversion to either or both is by no means constantly or even very frequently found. The figures relating to previous attacks, taken in conjunction with those on the pre-psychotic sexual life, fail to support the view that the onset of a psychosis associated with childbirth is a product of a morbid sexual constitution, with the puerperium acting as a specific precipitating factor. The latter must be regarded in the same way as any other precipitating factor. A bibliography is given.—*L. M. Hatfield* (Maine).

3879. [Anon.] A banker looks at mental hygiene. *Ment. Hygiene*, 1932, 16, No. 4.—*R. R. Willoughby* (Clark).

3880. [Anon.] Syringomyelia. *Eug. News*, 1931, 16, No. 10.—*R. R. Willoughby* (Clark).

3881. Becker, H., & Bruner, D. K. Attitude toward death and the dead. *Ment. Hygiene*, 1931, 15, No. 4.—*R. R. Willoughby* (Clark).

3882. Beers, C. W. Second international congress on mental hygiene: Paris, 1935. *Ment. Hygiene*, 1933, 17, 278-288.—The Second International Congress on Mental Hygiene will be held in Paris in 1935. The exact date has not yet been set, but it will probably be during June or July of that year. The preliminary announcement in French is given in this number of the journal.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.).

3883. Beley, P. L. Constance de la notion de constitution et du syndrome "instabilité" chez l'enfant et l'adolescent psychiquement anormaux. (Constancy of the temperamental elements and of the syndrome "instability" in the psychologically abnormal child and adolescent.) *Ann. méd.-psychol.*, 1933, 91, 364-368.—A case history is given of a patient with a bad heredity who showed many fears in his youth. He was always unstable but had a schizophrenic episode, a period in which he appeared depressed and attempted suicide, and a period characterized by paranoid ideas. Perhaps psychotherapy in his childhood would have prevented these episodes. The essential difficulty was an emotional instability.—*M. B. Mitchell* (New Hampshire State Hospital).

3884. Bien, E. The clinical psychogenic aspects of pruritus vulvae. *Psychoanal. Rev.*, 1933, 20, 186-196.—Essential pruritus is considered to be psychogenic



although there are differences of opinion in the literature. It may be a substitute for self-pollution which is modified for moral reasons. There is probably a narcissistic super-structure, a masochistic component indicated in the cases cited because of the melancholia which developed. By reason of the age of these patients there may be a desire of the woman to indulge in sex gratification before it is too late. This type of pruritus vulvae should be treated from the psychopathic angle, refraining from any local pseudo-treatment.—*L. S. Selling* (Institute for Juvenile Research, Chicago).

3885. Blacker, C. P. *Human values in psychological medicine*. London: Oxford Univ. Press, 1933. Pp. vii + 179.—The object of the book is "to relate the conception of value with that of idiosyncrasy, and to bring both of these conceptions into relation with biology." Values are regarded as arising out of the life of instinct, interests and sentiment. Human values are in general strongly influenced by facts of socialization. Patients' values are divided into esthetic and pivotal, the latter being any value which, for a patient, unifies and dominates his whole life. There is a chapter of criticism of Freud's notion of death instincts.—*F. C. Bartlett* (Cambridge, England).

3886. Bleuler, E. *La relación del cuerpo y el espíritu con la histeria*. (The relation of body and mind to hysteria.) *Arch. de neurol.*, 1931, 11, 223-251.—*A. B. Hunter* (Clark).

3887. Bott, E. A. *A psychologist looks at mental hygiene*. *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

3888. Bourguignon, G., & Eliopoulos, S. *Localisation de la lésion par l'action de la diélectrolyse dans un cas d'hémiplégie gauche avec aphasie*. (Localization of the lesion by diélectrolysis in a case of left hemiplegia with aphasia.) *C. r. Soc. biol.*, 1931, 106, 1142-1144.—(*Biol. Abst.* VII: 868).

3889. Brown, S., II. *Training the high-grade mental defective for community life*. *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

3890. Bückmann, I. *Kurze statistische Bemerkungen zur Anstaltsfürsorge für Geisteskranke in der Südafrikanischen Union*. (Short statistical observations on the institutional care of the mentally ill in the Union of South Africa.) *Zsch. f. psych. Hygiene*, 1933, 6, 11-20.—A group of tables showing the relationship of the various races of South Africa, the presence of which makes the problem of the mentally ill different from that in other countries. Comparative statistics are given, with tables showing the distribution of patients and personnel in the various provinces and tables showing the types of mental diseases in the various races in South Africa.—*L. S. Selling* (Institute for Juvenile Research, Chicago).

3891. Buday, L. v. *A concretumtól való elszakadás pszichológiai tényezői az orvostudomány történetében*. (The psychological factors of liberation from the concrete in the history of medical science.) *Gyógyászat*, 1932, 35-37.—Introduction. Abstraction and conceptual recognition. Intuitive and mystic cogni-

tion. The proceeding of approaching the concrete. The idea of illness. The fictional character of the idea of illness. The projection of ideas and their realization. Superseded knowledge and our view of the world. Judgments. Research on reasons. Imaginal causality. The generalizing tendency as the liberating factor from the concrete. The value of affects and of character in liberation from the concrete. The value of character. Historical parallels in the liberation from the concrete in the history of medical science and in esthetics. Conclusions.—*P. Ranschburg* (Budapest).

3892. Burrow, T. *A phylogenetic study of insanity in its underlying morphology*. *J. Amer. Med. Assn.*, 1933, 100, 648-651.—Traditional viewpoints of mental disease have localized the source of the disorder in conflicts at the symbolic level. Through methods of experimental analysis termed phyloanalysis, the author and his associates have studied the reactions of social groups composed of normal and neurotic subjects, and have reached a different point of view regarding the fundamental cause of mental disorders. The organism manifests sets of primary physiologic strains or internal tensional adjustments which concern the relation of the organism as a whole to its environment. This equipment was phylogenetically present before the development of language or specialization in the neopallium. There is superimposed upon this first mode of attention a second, which consists in those external tensional adjustments relating the brain and its external senses to the object of the environment by the symbol or idea. This second mode of attention represents an over-specialization of function in the cerebral segment which does not involve the body as a whole. In the author's view of mental disease there is a deep-seated physiological impairment within the organism consisting in tensions, alterations and disturbances that effect definite bodily processes. It arises from a conflict between those feelings and sensations belonging to the body as a whole and those of that cephalic region concerned with acquired ideas and images. Delusions, phobias, emotional conflicts, etc., are all symptoms of this deeplying physiological disparity, and are therefore remediable only by recourse to physiological methods of repair.—*D. J. Ingle* (Minnesota).

3893. Campbell, C. M. *Towards mental health: the schizophrenic problem*. Cambridge: Harvard Univ. Press, 1933. Pp. 110. \$1.25.—This book contains the 1932 Adolph Gehrman lectures in hygiene at the Illinois College of Medicine. The author discusses the importance of personal factors in mental hygiene as contrasted with the impersonal factors in ordinary hygiene. He elaborates on the importance of the personality and the social situation. He then outlines the general field of schizophrenia, elaborating behavior and thought patterns and their adaptive values, and illustrating with brief case histories. In the second chapter he discusses the harmonizing of conflicting trends, particularly sexual, the achievement of independence, and the attainment of a sense of personal value, also illustrated with case histories.

Chapter III is devoted to heredity and environment, with an elaboration of the social and cultural forces playing upon or conflicting with these. Parental influences, the social and psychosexual development, and the adaptive values of philosophic and religious beliefs are discussed. A summary of the points discussed concludes the book.—*M. H. Erickson* (Worcester State Hospital).

3894. Capgras, J., Joaki, E., & Thuillier, R. *Erotomanie et délire d'interprétation*. (Erotomania and delusion of interpretation.) *Ann. méd.-psychol.*, 1933, 91, 349-356.—The case history is given of a woman who interprets all the gestures of men as amatory signs. She has telepathic powers so that she can communicate with them. Her delusions that other patients are influencing her lover make her very jealous. She is essentially paranoid.—*M. B. Mitchell* (New Hampshire State Hospital).

3895. Chavigny, P. *La simulation*. (Simulation.) *Paris méd.*, 1932, 22, 156-160.—Simulation is not detected by a differential intuitive diagnosis, but by an extremely complete and well conducted differential diagnosis. Above all, simulation is much more often in the domain of psychology and psychiatry than it is in that of neurology or medicine.—*Math. H. Piéron* (Sorbonne).

3896. Cheney, C. O. *Psychiatry in the community*. *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

3897. Claude, H., Baruk, H., & Porak, R. *Sommeil cataleptique et mise en train psychomotrice volontaire. Etude psychologique au moyen de l'orographe de Mosso*. (Cataleptic sleep and the voluntary psychomotor sequelae. A psychological study by means of Mosso's orograph.) *Enceph.*, 1932, 27, 665-683.—The authors mean by cataleptic sleep a syndrome characterized by the existence of a psychic torpor, accompanied by a suspension of voluntary psychomotor activity. What differentiates this sensation of torpor from normal sleep is the existence of an impression of external strain, a loss of will. As objective signs we find the suspension of motor initiative, the conservation of attitudes, perseveration of impressed movements, and finally a special rigidity. The authors, in the first part, make a comparative study of the psychomotor functions, on the one hand in cataleptic sleep and catalepsy, and on the other hand in a series of neuro-motor and neurological disorders, and finally in experimental cataleptic sleep obtained by pharmacodynamic agents. In the second part they make a technical study of the curves, analyzing the special variations of the psychomotor processes in the course of cataleptic sleep. In the last part, they describe the psychophysiological mechanisms of voluntary motor activity.—*Math. H. Piéron* (Sorbonne).

3898. Claude, H., & Ey, H. *Hallucinations, pseudo-hallucinations et obsessions*. (Hallucinations, pseudo-hallucinations and obsessions.) *Ann. méd.-psychol.*, 1932, 90, 273 ff.—*A. B. Hunter* (Clark).

3899. Coleman, S. M. *Misidentification and non-recognition*. *J. Ment. Sci.*, 1933, 79, 42-51.—The

author offers a case study illustrating Capgras's "illusion of doubles," a syndrome treated largely by the French since its first description in 1923, but neglected in the English journals. The syndrome, a state of non-recognition (inability to identify the confronted person, though recognizing his appearance and behavior), is accompanied by a feeling of strangeness associated with a paranoid tendency to distrust, and occurs, apparently, only in women. The author presents Halberstadt's view that this syndrome demonstrates the activity of a pre-logical mentality analogous to the minds of primitives; Vié's differentiation between illusions of negative and of positive doubles; a description of the "illusion of intermetamorphosis"; and a clear account of Courbon's hypothesis of cenesthesia as the primary cause of all conditions of delusional misidentification. In an effort to account for the occurrence of this condition in women only the author offers a psychoanalytic theory depending upon the modification of the pre-Edipal phase and the Oedipus situation as it occurs in women. The female from infancy onward has had her faith in her love-object shattered. The mother having proved false in the beginning, all subsequent love-objects carry the same pattern. People are not what they seem; deception has occurred before and may occur again. The psychotic woman, rather than doubt the genuineness of her own feelings, decomposes the object and postulates the existence of doubles. A bibliography is appended.—*L. M. Hatfield* (Maine).

3900. Conos, M. B. *Un cas de mythomanie romane*. (A case of romantic mythomania.) *Ann. méd.-psychol.*, 1933, 91, 372.—*M. B. Mitchell* (New Hampshire State Hospital).

3901. Courbon, P., & Tusques, J. *Illusions d'intermétamorphose et de charme*. (Illusions of intermetamorphosis and of magic spell.) *Ann. méd.-psychol.*, 1932, 90, No. 4.—*A. B. Hunter* (Clark).

3902. Crothers, B. *The physical and the educational problems created by prolonged illness*. *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

3903. Crouzon, —, Christophe, —, & Fabre, —. *Aphasie de Wernicke avec automatisme verbal et monologues stéréotypés*. (Wernicke's aphasia with verbal automatism and stereotyped monologues.) *Rev. neur.*, 1932, 39 (II), 76-78.—Case of a patient whose disorders seem, in their total characteristics, to belong in the picture of Wernicke's aphasia, but who presents a manner of speech different from that usually found in aphasics. The difficulty in this patient bears particularly upon grammatical construction. She presents a stereotyped monologue, giving certain facts in chronological order, but without syntax. The words are correctly pronounced, and she expresses herself by means of circumlocutions. She tries to supplement the difficulty of finding the right word by ready-made expressions. It is to be supposed that this is an effort at reeducation, and that the patient is trying to save from oblivion as many words as she can. She has thus accumulated a great deal of material which is juxtaposed and attached within itself. She cannot dissociate this material in order to



arrange it into phrases, and she uses on each occasion the series of words appropriate to the circumstance; but the delivery, once released, automatically follows an invariable order.—*Math. H. Piéron* (Sorbonne).

3904. Davis, J. E. Resocializing tendencies in physical education for the mentally ill. *Ment. Hygiene*, 1931, 15, No. 3.—*R. R. Willoughby* (Clark).

3905. Davis, J. E. What can physical education contribute to mental hygiene? *Ment. Hygiene*, 1933, 17, 235-245.—The modern tendency is to integrate the principles of mental hygiene into a wholesome program of physical education. Physical education is a valuable medium of reeducation for the mentally ill. It brings into play the automatic reflex acts as primary and motivating factors in therapy. When its activities are graded from the standpoint of physical and psychical co-relation to meet the various capacities of the individual, it will be of more value to mental hygiene.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.)

3906. Demme, H. Meningitis. *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, 5, 150-174.—This is a survey of work on meningitis in general as well as a discussion of special forms of this disease, such as aseptic, traumatic, adhesive, and acute meningeal irritation. The author also discusses bacterial meningitis. A bibliography is appended.—*D. S. Oberlin* (Bryn Mawr).

3907. De Parrel, G., & Hoffer, H. Que faire pour les enfants déficients psychiques? (What should be done for mentally defective children?) *Concours méd.*, 1932, 54, 2740-2743; 2803-2805; 2998-3000.—Gives the different practical categories of mentally defective children according to the possibility of educating them, and advice as to the methods to be used in each category.—*Math. H. Piéron* (Sorbonne).

3908. Dupouy, R. Étude sur les évasions d'aliénés. (A study of the escapes of the insane.) *Ann. méd.-psychol.*, 1933, 91, 304-326.—Brief accounts are given of the escapes of 46 insane men and 8 insane women from various French hospitals. Most of these patients had been in the particular hospital less than six months when they escaped. The greater part of the escaped patients were chronic alcoholics or others not delirious or demented who were regularly committed and not free to leave legally. The old laws and their various interpretations concerning these patients are discussed, as well as their legal status and penal responsibility.—*M. B. Mitchell* (New Hampshire State Hospital).

3909. Dupouy, R., Pichard, H., & Altman, M. Mythomanie de compensation par sentiment d'infériorité. (Compensation mythomania through feeling of inferiority.) *Ann. méd.-psychol.*, 1932, 90, 555-562.—Report of observations on a case of mythomania in a girl of 25 years characterized by marked antisocial reactions. Investigations into the past history of the patient lead the authors to conclude that the present mental condition is due to a pronounced feeling of inferiority developed as a result of a peculiar home environment.—*H. W. Karn* (Clark).

3910. Ebaugh, F. G. What constitutes fellowship training in psychiatry; some fundamentals. *Ment. Hygiene*, 1931, 15, No. 4.—*R. R. Willoughby* (Clark).

3911. Evans, A. E. A tour of some mental hospitals of western Germany. *J. Ment. Sci.*, 1933, 79, 150-166.—A full description of the physical aspects, functional organization and types of treatment administered at Bedburg-Hau, the Colony of Bethel, Gütersloh (special reference here to the work of Simon), the University Clinic at Giessen, the Frankfurt Clinic, Wiesloch, Hirsau, Illenau, and Kork. The touring British physicians note certain impressive features of these German hospitals: comparatively easy admission; the emphasis on after-care which results in early discharges and decreased readmissions; state management rather than local; little use of fancy handicrafts, but the important role of physical training in early remedial endeavors; and, in comparison of German with British institutions, the high level of occupational interest and self-control in the patients of the former.—*L. M. Hatfield* (Maine).

3912. Fairbank, R. The subnormal child; seventeen years after. *Ment. Hygiene*, 17, 177-208.—This is a study of a group of 122 subnormal individuals who were investigated in 1914, and were later compared with a group of 90 normal individuals. The subnormal group, instead of turning out to be failures in life, have developed into adults who possess a marked degree of stability. The unusually favorable and constructive environment in which these people lived during adolescence is held to be the chief factor in bringing about this degree of stability among these subnormal cases.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.)

3913. Federn, P. Weariness of life in hospital patients. *Ment. Hygiene*, 1932, 16, No. 4.—*R. R. Willoughby* (Clark).

3914. Fleck, U. Erkrankungen der peripheren Nerven. (Diseases of the peripheral nerves.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, 5, 110-129.—This article is concerned with such topics as nerve operation, traumatic nerve injuries, narcotic paralysis and post-operative paralysis, hypertrophic polyneuritis, and syphilitic polyneuritis. The investigations that have been carried out in these subjects and others are reviewed. There is a large bibliography.—*D. S. Oberlin* (Bryn Mawr).

3915. Guiraud, P., & Deschamps, A. Paralyse générale avec alexie et apraxie idéo-motrice. (General paralysis with alexia and ideomotor apraxia.) *Ann. méd.-psychol.*, 1932, 90, 287-291.—A case study of a syphilitic of 57 years of age in whom a state of general paralysis is accompanied by alexia and ideomotor apraxia.—*H. W. Karn* (Clark).

3916. Hall, D. E., & Mohr, G. J. Prenatal attitudes of primiparae. A contribution to the mental hygiene of pregnancy. *Ment. Hygiene*, 1933, 17, 226-234.—Approximately 1500 expectant mothers were interviewed by the nurses of the Infant Welfare Society of Chicago. The superficial reactions of the mothers to their expected children and to their pregnancies

were obtained. In many instances a number of mental-hygiene problems existed. From the results of the questions asked these mothers it is obvious that a mental-hygiene approach should be used in treatment of the expectant mother.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.)

3917. Heldt, T. J. The mental-hygiene viewpoint in the general hospital. *Ment. Hygiene*, 1933, 17, 209-217.—The general hospital is a clearing house for the early recognition of nervous and mental disorders. For this reason internes in medicine should have included in their studies training in neuropsychiatry. Also, the mental-hygiene point of view should be encouraged in the minds of both laymen and professional men.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.)

3918. Heller, T. *Psychische Hygiene und Lehrberuf*. (Mental hygiene and the teaching profession.) *Zsch. f. psych. Hygiene*, 1933, 6, 40-48.—The teaching profession should be able to take the lead in educating the public in mental, as it already has in physical hygiene. Knowledge of the principles of mental hygiene is, however, still rudimentary among teachers, even in large cities. The author discusses its applications in the school, the results at puberty of unresolved childhood conflicts, the cooperation of school and home for the child's mental hygiene, and the teaching of the subject in normal schools. In particular, Heller emphasizes the coexistence of new and old educational ideals and methods and their effects on students in secondary schools. The adolescent leaving school often shows a peculiar inability to find his way into a vocation or to stand up against the difficulties of life. This is because school standards have been made so easy that the average pupil can meet them too easily. When suddenly confronted with exacting vocational demands, he feels these as tormenting forces and, too often, he collapses. A planned training in school, which would progressively develop his energies to the utmost, would accord better with mental hygiene, especially since under present conditions only the most capable and resistant have any prospect of overcoming the enormous vocational obstacles. While spared intellectually, the student is overstrained in competitive sports, with harmful nervous and mental results. Furthermore, examinations and class standing still remain the tests of achievement. The injurious effects of expectation, anxiety and disappointment in regard to scholastic attainments are often overlooked. The working together of teacher and student, hardly envisaged as yet, would lead to higher educational standards and careful study of individual personality. These recognized ideals can scarcely be realized, in secondary schools at least, with existing educational methods.—*M. E. Morse* (Catonsville, Md.)

3919. Heuyer, —, & Baille, —. *Tests moteurs dans l'orientation professionnelle des anormaux et de l'intelligence et du caractère*. (Motor tests in professional orientation for persons abnormal both in intelligence and character.) *Ann. méd.-psychol.*, 1932, 90, 317 ff.—*A. B. Hunter* (Clark).

3920. Heuyer, G., & Le Guillant, —. *Recherches sur l'affaiblissement intellectuel fondamental dans la démence précoce*. (Researches on the fundamental intellectual weakening in dementia praecox.) *Ann. méd.-psychol.*, 1932, 90, No. 3.—*A. B. Hunter* (Clark).

3921. Hoffmann, B. T. Symptomatology of hysteria. *Amer. J. Optom.*, 1932, 9.—*R. R. Willoughby* (Clark).

3922. Jelliffe, S. E. The death instinct in somatic and psychopathology. *Psychoanal. Rev.*, 1933, 30, 121-132.—Frank psychotic expressions of conflict sometimes clear up and leave as an alternative in the same patient disturbed renal functions, skin disorder or similar somatic conditions. The sadistic component operates like a castration or partial death of an organ and has thus brought out the disharmony of function. We find in some cases a sense of guilt which is finding atonement in illness and refuses to give up the penalty of suffering. If one can hurt the organ which is being used as a scapegoat, the punishment may be made to fit the crime. Sometimes operation may cure either psychoneurotic or psychotic individuals who have conversion symptoms, but it is necessary to have thorough psychoanalytic insight into a situation to decide. Operations on neurotically induced symptoms are almost uniformly unsuccessful.—*L. S. Selling* (Institute for Juvenile Research, Chicago).

3923. Kafka, V. *Sexualpathologie für Mediziner, Juristen und Psychologen*. (Sexual pathology for physicians, jurists and psychologists.) Leipzig: Deuticke, 1932.—The book is based upon a one-semester course of lectures which the author has for many years given for physicians, jurists and teachers. In order to permit a rapid survey of the entire field considerable emphasis is laid upon brevity. An explanation of the more important terms as well as a carefully prepared index are also useful for the same purpose. The first type of sexual abnormality discussed is that arising from temporary disturbances of and consequent substitutions for normal sex life. Masturbation is the next topic. In his discussion of sexual pathology as such the author distinguishes between disturbances which do and those which do not exhibit somatic modifications. The latter are further divided into quantitative and qualitative groups. The quantitative study deals with hyper- and hypo-forms, paradox, and the temporal changes of sexual capacity. The qualitative group has to do with variations of the goal of sexual activity: transvestitism, abnormal attachments, intercourse with animals, love of inanimate objects, auto-eroticism, etc. The sexual disturbances of insanity are discussed in a separate chapter. A distinction is also made between sexual abnormalities that are and those that are not accompanied by criminal acts. An entire chapter is devoted to sexual disturbances of criminals. The conclusion presents a résumé and evaluation of the relationship between sexual pathology and various other fields of study. An index of the relevant paragraphs of the German legal and penal codes is appended.—*V. Kafka* (Hamburg).



3924. Keys, N., & Nathan, J. M. Occupations for the mentally handicapped. *J. Appl. Psychol.*, 1932, 16, 497-511.—Of 2,755 positions held by graduates of the ungraded classes for mentally deficient pupils in the San Francisco public schools and similar groups in other parts of the country, only one in eight of those held by men and one in fourteen of those held by women rise above the level of unskilled labor. Workers in factories of various sorts, including canneries, constitute the largest single group (21.4% of the males, and 39.5% of the females). With 19.0% of the women employed engaged as domestics and nursemaids, and 15.7% in sewing, kitchen and laundry work, not to mention the even greater number helping about their homes, training in household arts is a practical vocational objective for these girls. Except for household arts, the occupations represented are so diverse and skills demanded in any one position so simple that it is doubtful whether public schools can provide specific vocational training on any extensive scale at these levels.—E. H. Kemp (Clark).

3925. Kotzovsky, D. Die Psycho-Hygiene und das Problem des Alters und der Lebensverlängerung. (Mental hygiene and the problem of old people and the lengthening of life.) *Zsch. f. psych. Hygiene*, 1933, 6, 8-9.—It has been shown that age is accompanied by a weakening of the immunity of the brain tissue, due to accumulation of poisonous products of the metabolism of the whole organism. There is a deterioration of the nervous tissue and the sleep mechanism. The regenerative function of the nervous system disappears. Women and phlegmatic people have a longer period of activity than men or sanguine individuals. The occupation has much to do with the problem. The problem of old age is more than one of mere every-day hygiene, psychiatry and pedagogy, but lies in a specialized type of hygiene of the brain.—L. S. Selling (Institute for Juvenile Research, Chicago).

3926. Lafora, G. R. Lo que debe ser un manicomio provincial. (Qualifications of a provincial insane hospital.) *Arch. de neurobiol.*, 1931, 11, 295-314.—A. B. Hunter (Clark).

3927. Lhermitte, J., & Levy, G. Hallucinoses consécutives à un ictus suivi d'hémiplégie gauche avec troubles de la sensibilité et mouvements involontaires. (Hallucinoses consecutive to an ictus followed by left hemiplegia with disorders of sensation and involuntary movements.) *Rev. neur.*, 1933, 40 (I), 67.—Case of a patient whose nervous disorders are related to the existence of a peduncular lesion which has reached the pyramidal pathway and which has grazed a small region of the red nucleus in its superior external part. This case presents a production of hallucinations and visual illusions to which the patient submits passively. The authors think that there actually exists a causal relation between the encephalic lesion and the appearance of the hallucinatory state. They also note that the state of emotion and anxiety into which these visions plunge the patient, the special color of his hallucinations (the

most frequent being death's heads and men with red heads) shows that peduncular hallucinations are not always neutral. The authors emphasize also the complete absence not only of the motor systems of the eyes, but also of the integrity of the sensory apparatus.—Math. H. Piéron (Sorbonne).

3928. Mallet, R. Autoconduction. Automatisme. Coenesthésie. (Autoconduction. Automatism. Cenesthesia.) *Ann. méd.-psychol.*, 1932, 90, 157 ff.—A. B. Hunter (Clark).

3929. Malzberg, B. Life tables for patients with mental disease. *Ment. Hygiene*, 1932, 16, No. 3.—R. R. Willoughby (Clark).

3930. Malzberg, B. Mental disease among Jews: a second study with a note on the relative prevalence of mental defect and epilepsy. *Ment. Hygiene*, 1931, 15, No. 4.—R. R. Willoughby (Clark).

3931. Marchand, L. Les troubles du langage au cours des accidents épileptiques conscients et mnésiques. (Speech difficulties in the course of conscious and mnesic epileptic attacks.) *Rev. neur.*, 1932, 39 (II), 652-660.—A description of epileptic cases with aphasic difficulties. The author points out that there exist in the normal individual certain physiological reactions very like the transitory forms of epileptic aphasia. Under the influence of different stimuli, such as projection of foreign bodies in the eye, laryngeal irritation, sudden noise, emotional shock, etc., there may supervene momentary arrest of thought, inability to speak, utterance of inappropriate words, or even loss of consciousness. It is not known what reflex modifications are thus produced, leading to the momentary functional suspension of the cerebral cortex, and it is possible that these have much analogy to those which condition epileptic attacks.—Math. H. Piéron (Sorbonne).

3932. Marinesco, —, & Nicolesco, —. Un cas de parkinsonisme accompagné de crises oculogyres et d'hallucinations colorées. (A case of parkinsonism accompanied by oculogyric crises and colored hallucinations.) *Rev. neur.*, 1932, 39, 691-693.—Description of a symptom never before described in encephalitis lethargica, hallucinations of the visual modality, especially colored visions. The author asks whether this is a case of a simple phenomenon superimposed upon and having little relation to the attacks, or whether these hallucinations have a physiopathological relationship to the crises. But, given the published observations of the hallucinatory peduncular syndromes, it would not be possible to deny all relationship between the encephalitic lesions rising at the level of the mesencephalon and the visual hallucinations of the patient whose case is described.—Math. H. Piéron (Sorbonne).

3933. Mason, F. V. A study of seven hundred maladjusted school teachers. *Ment. Hygiene*, 1931, 15, No. 3.—R. R. Willoughby (Clark).

3934. Mignot, R. La prédisposition aux accidents mentaux de l'alcoolisme chronique. (The predisposition to mental symptoms of chronic alcoholics.) *Ann. méd.-psychol.*, 1933, 91, 300-303.—Malaria and

cranial trauma are so frequently found in the histories of patients with alcoholic psychoses that they are considered predisposing causes of the psychoses. Therefore, those who have had cranial injuries or malaria should abstain from the use of all alcoholic beverages.—*M. B. Mitchell* (New Hampshire State Hospital).

3935. Morgan, I. L. Research invites the psychiatric social worker. *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

3936. Morgenthaler, W., & Farel, O. L. Le traitement des malades nerveux et mentaux. (The treatment of nervous and mental patients.) Bern: Huber, 1930. Pp. 242.—*A. B. Hunter* (Clark).

3937. Moxon, C. The value of psychological training in organic disability and disease. *Ment. Hygiene*, 1931, 15, No. 4.—*R. R. Willoughby* (Clark).

3938. Müller, H. Bericht über die psychiatrische Literatur im Jahre 1929. Literaturheft zum 90. und 91. Bande der Allgemeinen Zeitschrift für Psychiatrie. (A report of the psychiatric literature of 1929. Literary supplement to Vols. 90 and 91 of the *Allgemeine Zeitschrift für Psychiatrie*.) Berlin: Gruyter, 1932. Pp. 304. RM. 18.—German, English, American, Swiss and Scandinavian publications in psychiatry and the adjacent sciences are listed in the 12 chapters of this book. A special chapter is devoted to psychology. Abstracts are given of many of these publications; the remainder appear only by title. Publication of these abstracts will henceforth occur in the mid-year following the year reported.—*H. Müller* (Leipzig).

3939. Myerson, A. Sanity in mental hygiene. *Ment. Hygiene*, 1933, 17, 218-225.—Mental hygiene must not make the mistake of inferring that every deviation from a hypothetical norm that the individual shows is pathological. The time is now ripe for mental hygiene to enter social movements such as abolishing slums, in order to get away from the idea that it is only the individual who is to be adjusted. Mental hygiene must not be dogmatic. It must take account of both the individual and his milieu.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.).

3940. Nacht, S. La structure inconsciente de quelques psychoses. (The unconscious structure of some psychoses.) *Encéph.*, 1932, 27, 903-927.—The author declares that, valuable as are the facts which the exploration of the unconscious seems to have permitted us to acquire about the structure of the psychoses, and thus about mental disease, nevertheless they should be regarded at present as new paths and plans of work. These facts do not imply any conclusion as to the primary causes of the psychoses; they only indicate how things appear to be at a given moment. Two facts seem pivotal in the structure of psychoses: first, the loss of the possibility of affective investment of the external world (love of others, interest in life), and second, diversion or turning away of the opposed libido due to a regression on a former psycho-affective plane hitherto marked by an infantile fixation in the course of the illness. These two facts

explain the form and structure of the illness, but do not indicate what provokes it.—*Math. H. Piéron* (Sorbonne).

3941. Neustadt, R. Ueber Drangzustände bei Schwachsinnigen. (Compulsive states in mental defectives.) *Arch. f. Psychiat.*, 1932, 97, 127-141.—The anatomical basis of mental defect—in contradistinction to the symptomatic—is a brain lesion, and the psychic peculiarities of defectives also originate in this encephalopathy. In four cases (which might be increased in number), Neustadt demonstrates true compulsive states which had their most important origin not in external stimuli—although their reactive occurrence is not to be absolutely excluded—but in internal conditions. These compulsive states in defectives mean an organic compulsion. The recognition of this fact puts these defectives into the category of patients. The personnel surrounding them should be taught by the physician to regulate the environment so that the vicious circle between the internal compulsive unrest and external irritating factors will be broken at the latter point. Furthermore, in connection with defective delinquents, the important aspect for the court is not the degree of intellectual defect, but the entire concept of the encephalopathy, which is the cause of the feeble-mindedness and its various manifestations as well.—*M. E. Morse* (Catonsville, Md.).

3942. Nieto, D. Paranoia (estado actual). (Paranoia; its present status.) *Arch. de neurobiol.*, 1931, 11, 315-326.—*A. B. Hunter* (Clark).

3943. Péron, M. N. La thérapeutique par les chocs en neuropsychiatrie. (Therapy by means of shock in neuropsychiatry.) *Ann. méd.-psychol.*, 1933, 91, 90-91.—*A. B. Hunter* (Clark).

3944. Petit, M. G. Excitation maniaque et paranoia. I. Paranoia et cyclothymie. La phase paranoïaque et dysphorique des accès maniaques. Importance sociale et médico-légale. (Manic and paranoid excitation. I. Paranoia and cyclothymia. The paranoid and dysphoric phase of the manic attacks. Social and medico-legal importance.) *Ann. méd.-psychol.*, 1933, 91, 369.—Many patients suffer dysphoric and paranoid episodes during brief jaundice depressions, and preceding or following manic phases of cyclothymia. This is a summary of an article to be published in a later issue.—*M. B. Mitchell* (New Hampshire State Hospital).

3945. Petit, M. G. Excitation maniaque et paranoia. II. Dissimulation utilitaire de l'excitation psychique et réduction volontaire de l'agitation dans la manie. Importance sociale et médico-légale. (Manic and paranoid excitation. II. Utilitarian dissimulation of psychical excitation and voluntary reduction of agitation in the manic. Social and medico-legal importance.) *Ann. méd.-psychol.*, 1933, 91, 369-371.—This is a summary and discussion of an article to appear in full later.—*M. B. Mitchell* (New Hampshire State Hospital).

3946. Pezalla, —. Einseitige Begabung Schwachsinniger. (One-sided endowment in weak-minded



persons.) *Hilfsschule*, 1932, 25, 457-466.—A study of one-sided endowments in normal people shows these to be correlated with a hypertrophy of specific brain areas. Parallel investigations of weak-minded persons exhibiting a high development of certain abilities have never been made. The author reviews the literature of this subject in considerable detail. He divides the cases into the following groups: memory experts, mimics, musicians, and spontaneous poets. A pedagogic application of this information is suggested in the concluding section. Bibliography.—W. Nolte (Berlin).

3947. Pichard, H., & Liber, A. *Ethylisme et polydipsie. Lésion de la selle turcique.* (Ethylism and polydipsia. A lesion in the sella turcica.) *Ann. méd.-psychol.*, 1933, 91, 100-103.—A. B. Hunter (Clark).

3948. Porc'her, Y. J. M. *Remarques à propos des états hallucinatoires.* (Observations on states of hallucination.) *Ann. méd.-psychol.*, 1933, 91, 94-93.—A. B. Hunter (Clark).

3949. Repond, A. *Le traitement psychothérapique des maladies mentales.* (The psychotherapeutic treatment of mental diseases.) *Ann. méd.-psychol.*, 1933, 91, 265-299.—The hospitals where psychotherapy is used have many more cured and improved patients than the others. All kinds of functional diseases have been found to react favorably to such treatment, including manic-depressive and dementia praecox cases. The effect of the surroundings, the doctors and attendants upon the patients is discussed; each of these three factors should be such as to contribute to the improvement of the patient. The location of the patient with respect to other patients is also a contributing point in his cure. If the work a patient does is to have any therapeutic value, it should be adapted to his personality and should be a sublimation of conscious or unconscious tendencies.—M. B. Mitchell (New Hampshire State Hospital).

3950. Sacristán, J. M. *Constitución en psiquiatría.* (Constitution in psychiatry.) *Arch. de neurobiol.*, 1931, 11, 252-265.—A. B. Hunter (Clark).

3951. Schneider, K. *Allgemeine Psychopathologie in Jahre 1932.* (General psychopathology in 1932.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, 5, 143-149.—This paper deals with types of psychopathic experience, including disturbances of sensation, perception, ideas, feelings, impulses, and volition; the fundamental properties of experience, viz., dissociated personality, disturbances of the sense of time, and memory defects; and the background of experience, including attention, consciousness and intelligence. There is a bibliography.—D. S. Oberlin (Bryn Mawr).

3952. Schulze-Jahde, K. *Psychogen.* (Psychogenic.) *Zentbl. f. Psychotherap.*, 1933, 6, 96-110.—The author gives a critical historical review of the so-called psychophysical problem, and expounds his aspect theory, the thesis of which is: Body and mind are mythical substitutions for functions of the human being, who is the substratum in which various func-

tions go on. Every experience is bound to a substratum, the ego, which is neither body nor soul, but an allogical foundation for experience. All phenomena lie exclusively in the subjective or objective spheres; nothing goes on in the ego. Body and mind, objective and subjective, are equally real aspects or forms of observation by the ego, a unity of similar processes presented in different ways, and therefore having different forms. In principle, it is entirely indifferent whether one defines an object in terms of physical characteristics or as a complex experience of sensations, reactions and associations. Psychical and physical are neither identical nor combined into a larger unity. They are aspects of one process experienced in two ways. Dualism, monism and parallelism are single parts of the aspect theory. The term "psychogenic" is misleading in that *gen* denotes origin. A disease, however, may be psychoformic or physioformic. There are two valid methods of attacking a disease: from the physioformic side with objective methods; and from the psychoformic aspect with psychotherapy. The aspect theory is better adapted than the others to explain stigmatization, hysteria, and miraculous cures. J. H. Schulz's "autogenous training" tends in the direction of the aspect theory, to which, in fact, it is an elementary introduction.—M. E. Morse (Catonsville, Md.)

3953. Seelert, H. *Symptomatische Psychosen.* (Symptomatic psychoses.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, 5, 130-142.—The author takes up the classifications of psychoses as given by various investigators. He doubts that a strict differentiation can be made. The investigations of hypoglycemia are discussed in detail, since they have brought so much new material to the fields of psychiatry and neurology. There is a bibliography.—D. S. Oberlin (Bryn Mawr).

3954. Sommer, R. *Familienforschung und psychische Hygiene.* (Genealogy and mental hygiene.) *Zsch. f. psych. Hygiene*, 1933, 6, 66-72.—In celebration of Stephen Kekule v. Stradonitz's seventieth birthday, Sommer gives a bibliography of his writings on genealogy, eugenics and the family histories of certain celebrities. Sommer also traces his own interest in such subjects, which resulted in the Congress for Genealogy and Eugenics (1912). He also outlines the evolution of genealogy from its beginnings in ancestor lists, documentary archives, and heraldry. Connected even at this stage with historical science, it contained two scientific nuclei—the beginnings of genealogical diagnosis in the making of family trees, and the recognition of physical and mental similarities in certain groups of blood relations. Although the earliest genealogy was concerned with royalty, yet for centuries patrician families of old cities have shown a similar interest in literary and artistic form in their coats-of-arms and grave-memorials. An extraordinarily interesting phenomenon from the standpoint of cultural history is the astonishing increase in genealogical interest among the bourgeoisie since the revolution following the world war. The first medical interest in genealogy came from psy-

chiatry, and later the study of heredity among all living things was integrated into the sciences of genetics and eugenics.—*M. E. Morse* (Catonsville, Md.)

3955. Suttie, I. D. A common standpoint and foundation for psychopathology. *J. Ment. Sci.*, 1933, 79, 18-26.—An attempt to reconcile Adlerism and Freudism. The author believes that all cultural, all non-appetitive need originates with the infant's gradual privation of the mother, and that a character formation and the differentiation of ideals, ambitions and "life styles" represent the various ways in which different people compensate for this primeval loss. In the very act of denial the mother indicates to the child-mind how it can best retain, recover or replace her; then the child begins coveting the father's strength, authority and assured position with the mother. The adaptability of man henceforth in developing interests with other than instinctive goals results in a prolonged and helpless infancy and in a never completely satisfied desire to do or to have "something else." This satisfaction may be attained in the state of being in love, in the mother's absorption in her baby, or in the praecox regression. Freud's primeval mother-craving, then, is not a specifically and definitely sexual urge; and Adler's struggle for superiority is only one way of binding other people to one. But the germ of truth in Freud is his emphasis on the fact that cultural drive originates in longing for the mother; and in Adler his emphasis on the essentially personal and social form which all this striving takes.—*L. M. Hatfield* (Maine).

3956. Toulouse, E., & Courtois, A. Séquelles mentales d'encéphalopathies aiguës (d'après 100 observations). (Mental sequelae in acute encephalopathies, according to 100 observations.) *Ann. méd.-psychol.*, 1933, 91, 92-93.—*A. B. Hunter* (Clark).

3957. Ulrici, H. Zur Psychologie der Phthisiker. (The psychology of consumptives.) *Dtsch. med. Woch.*, 1932, 2002-2004.—The author discusses first the comparative frequency of tuberculosis in the different physical types. It is most common in the asthenics. Acute forms often occur in the athletic type, chiefly among men, while the pyknic is seldom affected. The psychic make-up corresponds most often to Kretschmer's picture of the schizothymic. The peculiarities of tuberculous patients are due to their type rather than to the disease, which cannot change the total mental attitude, rooted as it is in hereditary endowment. Perhaps the effect of the patient's environment on his psyche is greater than that of the disease. In conclusion, Ulrici emphasizes the task of psychotherapy—to rescue the patient from the consciousness of sickness.—*M. E. Morse* (Catonsville, Md.)

3958. Vance, B. B., & Hefner, R. A. A study of the inheritance of mental deficiencies associated with dementia praecox. *Eng. News*, 1932, 17, No. 1.—*R. R. Willoughby* (Clark).

3959. Vié, J. Contribution à l'étude du caractère schizoïde dans les antécédents des démences précoces. (Contribution to the study of the schizoid

character in the antecedents of dementia praecox patients.) *Paris méd.*, 1932, 22, 128-130.—Is dementia praecox developed, as Kretschmer believes, on a special constitutional background, carrying intimately allied physical and mental anomalies? The author shows that the character of the subjects before the appearance of the psychosis may be normal, but that it can have been modified by intercurrent affections, and can indicate the state of suffering of the organism. On the other hand, premature manifestations of the mental disease may leave as sequelae discrete disorders. The existence of a schizoid constitution can be seen only in a small number of cases, in which morbid induction of growth in mentally abnormal surroundings must be given a share.—*Math. H. Piéron* (Sorbonne).

3960. Vurpas, —, & Corman, —. Les formes graves des obsessions. (The serious forms of obsessions.) *Paris méd.*, 1932, No. 32, 113-120.—The state of the patients sometimes resembles the states into which demented are plunged. However, an attentive analysis shows that the intelligence is not injured, and that the seriousness of the obsession lies entirely in the effect which it has upon normal activity. These obsessive states are never allied to intellectual decay.—*Math. H. Piéron* (Sorbonne).

3961. Weygandt, W. Japanische Irrenfürsorge. (Care of mental patients in Japan.) *Zsch. f. psych. Hygiene*, 1933, 6, 73-85.—Weygandt reports the impressions gained during a recent visit to Japan and Manchuria. The care of mental patients in Japan has had a peculiar development. The nation has intense social and family feeling. Daily life and customs are simple, clean, orderly, and esthetic, and these tendencies are reflected in the humane treatment of mental patients. Families generally prefer to keep their sick at home. As motifs derived from mental disease play a large part in Japanese legends and superstitions, the attitude toward psychotic patients is more friendly than in the West. Family care has been practised for centuries in the vicinity of certain temples. At present there are three classes of institutions: public hospitals (the first established in 1875); private sanatoria; and clinics connected with medical schools. Mental defectives are usually cared for in private institutions, and there is no special provision for epileptics. Progress both in scientific research and care of patients is gratifying. As the dominant influence on Japanese psychiatry has always been German, pathology and psychology are emphasized, while psychoanalysis is taught in only one clinic. The forms of mental disease are about the same as in Germany. Schizophrenia is by far the most frequent. Paresis is not excessive, although syphilis is very prevalent. Alcoholism and drug addiction play minor roles. Noteworthy is the extraordinarily quiet and conventional behavior of patients; self-control is maintained even during psychoses.—*M. E. Morse* (Catonsville, Md.)

3962. Winckler, G. Ein Beitrag zur Behandlung hysterischer Störungen durch den praktischen Arzt. (A contribution to the treatment of hysterical dis-



turbances by the general practitioner.) *Med. Welt*, 1932, 847-849.—On account of continued contact with his patients, the general practitioner often has the opportunity actually to prevent hysterical disturbances by means of purposeful psychic direction. Winckler also reports cases of manifest hysterical reactions of the alien or borderline-neurosis type of J. H. Schultz, in which he, as a general practitioner, obtained lasting results. These relatively simple types are common phenomena to every one who knows human nature, and their decisive factor lies in a beginning disturbance of the life balance. The author discusses the basis and technic of his method. Although in certain cases, the physician who is not a psychotherapeutic specialist can achieve a cure through common-sense methods, nevertheless he should not shirk the trouble of determining by means of a psychological profile whether in reality he is dealing with a simple, isolated borderline symptom or an alarm signal of deep change in personality. The author is aware, however, that often he merely averted the acute conflict and its consequences, and that the hysterical disposition remained.—*M. E. Morse* (Catonsville, Md.)

3963. Wuth, O. *Chemie der Psychosen*. (The chemistry of psychoses.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, 5, 175-186.—This article is concerned with the significance of the disturbance of acid-alkali neutrality in clinical work, particularly in neurological and psychiatric problems.—*D. S. Oberlin* (Bryn Mawr).

3964. Zacharoff, L. *Mental hygiene in Soviet industry*. *Ment. Hygiene*, 1931, 15, No. 3.—*R. R. Willoughby* (Clark).

[See also abstracts 3714, 3802, 3803, 3806, 3819, 3834, 3839, 3990, 3996, 4069, 4079, 4089, 4116, 4128, 4135, 4153.]

#### SOCIAL FUNCTIONS OF THE INDIVIDUAL

3965. Bogardus, E. S. *A social distance scale*. *Sociol. & Soc. Res.*, 1933, 17, 265-271.—In constructing this social distance scale, 60 single sentence descriptions heard in ordinary conversations and representing different types of social relationship were rated according to the amount of social distance each possessed. By means of judgments from 100 faculty members and graduate students it was possible to obtain a series of 7 situations with an equidistant mean rating. In administering this test composed of the 7 situations, each subject is given a list of 40 races, 30 occupations, and 30 religions with detailed instructions for rating.—*J. R. Hilgard* (Yale).

3966. Broom, B. H., & Basinger, M. *On the determination of the intelligence of adults from samples of their penmanship*. *J. Appl. Psychol.*, 1932, 16, 515-519.—These investigators conclude that "it is as easy to judge weight from penmanship as it is to judge intelligence; neither is judged correctly except by chance. Average judgments by 25 adults as to decile placements in a scale of intelligence and of weight for the 30 subjects lack validity. The percentages of correct judgments of decile placements

in intelligence and in weight for the 30 subjects and by the 25 judges lack reliability."—*E. H. Kemp* (Clark).

3967. Brown, F. W. *Personality integration as the essential factor in the permanent cure of stuttering*. *Ment. Hygiene*, 1933, 17, 266-277.—There are many methods of treating stuttering. Some are temporary, others eliminate speech difficulties, but the underlying lack of personality integration finds an outlet in another form which is frequently as severe a handicap as stuttering. Personality integration is suggested as the essential factor in curing stuttering permanently.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.)

3968. Bührig, W. *Ist die Graphologie zuverlässig?* (Is graphology valid?) *Psychol. Rundschau*, 1933, 4, 269-271.—The question arises as to the reliance that may be placed upon graphology for character delineation. Confidence has grown in it in recent years. Bobertag's experimental statistical investigation is a signal contribution to the field, revealing reliability of 80.7% as against 6% in the case of his studies in astrology.—*A. B. Herrig* (Michigan Central State Teachers College).

3969. Bührig, W. *Von ähnlichen Schriften*. (Concerning similar handwritings.) *Psychol. Rundschau*, 1933, 4, 279-280.—Two samples of very similar handwriting are compared for their differences, and the variations of personality of their writers are shown to correspond with such differences in writing.—*A. B. Herrig* (Michigan Central State Teachers College).

3970. Case, C. M. *Technocracy and social engineering*. *Sociol. & Soc. Res.*, 1933, 17, 331-339.—Technological and social engineering should not be confused. The former has to do with the manipulation of inanimate materials and forces, while social engineering attempts to modify or direct the basic wishes and acquired social attitudes of human beings as members of society.—*J. R. Hilgard* (Yale).

3971. Cattell, J. M. *The need of opportunity for exceptional ability*. *Science*, 1933, 77, 491-492.—The author suggests that the United States provide for men and women of exceptional scientific ability who, owing to race or political views, are unable to do at home work of value to the whole world.—*H. W. Karn* (Clark).

3972. Courbon, P., & Francès, —. *Un cas de colère pathologique ayant nécessité l'internement*. (A case of pathological anger having necessitated internment.) *Ann. méd.-psychol.*, 1932, 90, 534-539.—A study of pathological anger due to syphilitic infection in a female of 39 years of age. The patient's behavior is characterized by extreme irritableness, violent fits of anger, and threats to commit murder and suicide.—*H. W. Karn* (Clark).

3973. Courbon, P., & Tusques, J. *Anatopisme mental et délinquance. Le vol des étrangers aux étalages parisiens*. (Mental anatopism and delinquency. Shop-lifting by foreigners in Paris stores.)

*Ann. méd.-psychol.*, 1932, 90, No. 3.—A. B. Hunter (Clark).

3974. Dear, R. E. Distribution and persistence according to parental occupations represented in the secondary schools in Michigan. *J. Educ. Res.*, 1933, 26, 585-592.—Data from 8 of the 14 cities in Michigan with population from 10,000 to 20,000. Percentages are given from 15 trades, and are compared for the individual cities and with the results of other studies.—S. W. Fernberger (Pennsylvania).

3975. Dierks, H. Experimentelle Untersuchungen des sozialen Verhaltens. (Experimental investigations of social behavior.) *Zsch. f. angew. Psychol.*, 1932, 43, 193-270.—The purpose of this study was to investigate the effectiveness of the "two-subject method" invented by Henning for certain character tests, especially those for leadership. Henning's fundamental assumption is that qualities of character can be judged only by observing the behavior of two or more subjects towards each other. Of the tests so far worked out the author used the two-scissors test and six other similar ones. His conclusion is that the objective records in these tests do not permit definite inferences about the character of the subjects tested.—K. F. Muensinger (Colorado).

3976. Dumas, G. La mimique vocale. (Vocal mimicry.) *Ann. méd.-psychol.*, 1932, 90, 129 ff.—A. B. Hunter (Clark).

3977. Dumas, G. Les mimiques. (Mimics.) *Rev. phil.*, 1932, 57, 161-218.—Mimicry is defined by the author as an imitation; one can distinguish as many kinds as there are emotions which can be imitated. The author reviews facial mimicry, vocal mimicry, and mimicry of gesture, often associated with facial mimicry, which can, however, be dissociated to express sentiments or abstract ideas. He mentions mimicry of laughter and of tears, which reproduce reactions upon which the will has no direct influence. He also shows a mimicry of attitude, of gait, of writing. In all these domains, mimicry is an imitation by which we express sentiments or traits of character. The author shows the social character which clothes mimicry, in spite of all the individual initiative which can collaborate in it.—Math. H. Piéron (Sorbonne).

3978. Dupouy, R., & Pichard, H. Une tentative étrange de suicide. Considérations sur le suicide "favorisé." (An unusual attempt at suicide. Considerations on "favored" suicide.) *Ann. méd.-psychol.*, 1932, 90, 173 ff.—A. B. Hunter (Clark).

3979. Eliasberg, W. Rechtspflege und Psychologie. Eine Einführung in die Wissenschaften vom seelischen Leben des Menschen. (Psychology and the administration of justice. An introduction to the sciences of mental life in man.) Berlin: Heymanns, 1933. Pp. 172. RM. 6.—In this discussion of the relationship between law and psychology the principal topic is motivation. Similar motives produce similar modes of behaving. Motivation encompasses and modifies everything about the person motivated. Hence, regardless of individual differ-

ences, two persons acting from the same motive are to that extent exactly alike.—P. Plaut (Berlin).

3980. Fetscher, R. Der Stand und die Zukunft der Eheberatung in Deutschland. (The status and future of matrimonial counsel in Germany.) *Zsch. f. psych. Hygiene*, 1933, 6, 85-91.—Of the 98 German and Austrian cities having more than 50,000 inhabitants, 49 have centers where advice concerning marriage and related matters may be obtained. Although the organization and viewpoint of these centers are so varied that their work is not comparable, yet the idea has taken root. The first question in connection with the subject is whether counsel concerning marriage is possible, and if so, what kind of program is advisable. Eugenic problems are only part of the concern of such centers, because independently of marriage as well as within it advice is sought on other matters. Voluntary consultation reaches only a small proportion of engaged couples, but those who are urged to come to the center conceal their most vital difficulties. Experience has shown that it is unwise to require a health certificate before marriage. Fetscher outlines a plan to overcome these drawbacks, the essential features of which are: every person before entering matrimony would be required to file with the counsellor a history of himself and his family. The counsellors would be specially trained physicians appointed by the state. Consultation would be voluntary. One of the possibilities of this system would be the gradual formation of an "inventory" of the congenitally defective population and, when legal authority was given, sterilization.—M. E. Morse (Catonsville, Md.).

3981. Feuerlicht, I. Analyse des Idyllischen. (An analysis of the idyllic.) *Psychoanal. Bewegung*, 1933, 5, 167-185.—The idyl is to be recognized as a reversion to the infantile state, with a pleasure accompaniment in withdrawal from reality. The article analyzes Jean Paul and Heinrich Seidel as illustrations of the type that has never left childhood, and Goethe, Hebbel, and Thomas Mann as those who, although mature, at times retire to childhood. The idyl is rooted in the life of its author with a strong longing for past experiences of home and childhood.—A. B. Herrig (Michigan Central State Teachers College).

3982. Glover, E. Das Institut zur wissenschaftlichen Behandlung der Kriminalität, London. (The Institute for Scientific Treatment of Criminality, London.) *Psychoanal. Bewegung*, 1933, 5, 197-200.—The lecture delivered at the opening of the Institute for Scientific Treatment of Criminality by Edward Glover is briefly reviewed. In it are set forth the purposes of the institute. In his concluding address Glover stresses the values of the undertaking as seen after a year of experience, and shows its needs for the future. Outstanding psychologists, sociologists and jurists attended the meeting.—A. B. Herrig (Michigan Central State Teachers College).

3983. Glueck, S. The International Prison Congress of 1930. *Ment. Hygiene*, 1931, 15, No. 4.—R. R. Willoughby (Clark).



3984. Goldenweiser, A. *History, psychology and culture*. New York: Knopf, 1933. Pp. xii + 475 + xii. \$5.00.—Of the six parts of this volume, Part I presents a set of categories for an introduction to social science, in which the accidental and the deterministic appear as two inseparable ingredients of the historical process; shows that the concepts of convergence, parallelism and diffusion can be regarded only as heuristic principles; and concludes that history and cultural anthropology must be approached on the psychological level. Part II is a critical survey of the theories of Frazer, Lévy-Bruhl, Wundt, Freud, and others, and of recent tendencies of American ethnologists. Part III is an analytic study of totemism with the conclusion that the totemic complex is variable, with no single fundamental feature or set of features; that its origin may be explained by the pattern theory, based upon the assumption of an unknown "first origin" transformed by diffusion of new features into a totemic complex; and that it flourishes only when carried by a sib system. Totemism is defined as "the tendency of definite social units to become associated with objects and symbols of emotional value"; or in psychological terms, "the specific socialization of emotional values." Part IV discusses theories of the origin and nature of religion—animism, naturalism and animatism; and of the essential factors in magic and religion—spirit, *mana*, the religious thrill, and the emotional act. Part V shows that various races, demonstrably different psychologically as well as physically, are not necessarily therefore unequal. The superiority or inferiority of none has been proven. Part VI includes essays on various subjects; the limitations of woman's creative ability; the mechanistic nature of Freud's conception of the unconscious, which denies him the status of psychologist; and the new or experimental schools. There is an extensive bibliography.—*M. P. Montgomery* (Faribault, Minn.)

3985. Graewe, H. *Untersuchung der Entwicklung des Zeichnens*. (A study of the development of drawing.) Halle: Schroedel, 1932. Pp. 180. RM. 2.60.—Over 6,000 drawings by preschool children, pupils of the lower grade schools and adults (the latter for the purpose of comparison) were assembled. The method of study closely resembled that of Ziehen. Drawings were made from geometric figures, irregular patterns, houses, animals, etc.; also of objects such as a cube, water glass, automobile, human being, etc. Two minutes after the drawing was done another, from memory, was requested. This was followed by another period of copying, and then the subject was asked to draw from memory some object which he had not recently seen; tasks in creative and imaginative drawing were also given. The results were judged and classified in terms of conceptual drawing, spatial arrangement, the "whole" method of visualizing, ability to deal with illusions, the tendency toward completeness or adequacy relative to the problem attacked, perseverance as displayed by the drawing itself, degrees of erroneous synthesis of elements, etc. It was found that several tendencies in opposite directions may be simultaneously operative. The most

important developmental years for boys are 5 and 12. Bibliography.—*H. Graewe* (Halle).

3986. Groos, K. *Zur Psychologie und Metaphysik des Werterlebens*. (Psychological and metaphysical aspects of the experience of value.) Berlin: Junker & Dünhaupt, 1932. Pp. 46. RM. 1.80.—Proceeding on a metaphysical basis, this treatise undertakes to discover the reality of human experience—especially as regards the act of valuing. The discussion therefore begins with an analysis of the valuing experience as disclosed by hereditary drives and instincts of man. It is pointed out that no mere specification of the mechanisms involved will suffice; the thing to determine is the nature of the powers behind these mechanisms.—*K. Groos* (Tübingen).

3987. Groves, E. R. *The family*. *Amer. J. Sociol.*, 1933, 38, 873-879.—The year 1932 was uneventful for the American family, aside from the effects of the depression. Economic pressure has decreased family morale, increased tension, and hurt children and youth. Married women working outside the family have especially suffered from economic insecurity. Educational activities, notably of the churches and social agencies, have continued. Family research has not been neglected. The most important contribution along this line has come from the investigation of the Research Committee on Social Trends.—(Courtesy *Amer. J. Sociol.*)

3988. Hapke, E. *Das Geschlechtsleben der Gefangenen*. (The sexual life of prisoners.) *Zsch. f. angew. Psychol.*, 1932, 43, 271-300.—Hapke presents the report of a young and normal prisoner with some comments of his own. Such topics are discussed as the use of novels and pictures for sexual stimulation, masturbation, and homosexual practices among prisoners.—*K. F. Muensinger* (Colorado).

3989. Herskovits, M. J. *Race relations*. *Amer. J. Sociol.*, 1933, 38, 913-929.—The depression has apparently had little influence on race relations during the year. Two events of significance are the Massie case and the report by the Appraisal Commission of the Laymen's Foreign Mission Inquiry. Negro-white relations have manifested the normal state of unrest. The movement to restrict immigration has continued, with decrease of immigration by about 76% during the year. Deportations have continued in greater number than ever before. The situation of the Indian has remained unchanged. Two publications of importance are T. J. Woofter's chapter on "The status of racial and ethnic groups" in *Recent Social Trends* and Donald Young's volume on *American Minority Peoples*.—(Courtesy *Amer. J. Sociol.*)

3990. Hopwood, J. S., & Snell, H. K. *Amnesia in relation to crime*. *J. Ment. Sci.*, 1933, 79, 27-41.—A study of 100 inmates of a state criminal asylum, selected on the basis that at their trials amnesia for their crimes was alleged. A statistical treatment of the data reveals that practically all the patients were from the laboring or lower middle classes and between the ages of 20 and 60. Among other facts shown by the data are: the first account of the crime given by the patient is of paramount importance, and should

be recorded with all the detail he can provide; a history of chronic alcoholism or of other indications of a psychopathic personality, including a previous loss of memory, is frequently elicited; the existence of a neuropathic heredity is to be expected in a fair number of cases; the character of the alleged amnesia period is of primary value (e.g., in genuine cases the beginning and more especially the end are frequently blurred, and usually the loss of memory prior to the commission of the crime is of much shorter duration than that of the subsequent period before normal consciousness resumes control); and a sudden return of memory almost certainly indicates malingering. A short bibliography.—L. M. Hatfield (Maine).

3991. Jasper, H. H., & Murray, E. A study of eye-movements of stutterers during oral reading. *J. Exper. Psychol.*, 1932, 15, 528-538.—Photographic records were made of eye-movements of 15 stutterers during oral reading. These records were compared with like movements of normal speakers. Comparisons were made of the differences in measurements of eye-movements in oral and in silent reading of both stutterers and normal speakers. Stutterers in oral reading present more regressions per line, more fixation pauses per line, and about the same average duration of fixation as do normal speakers. Stutterers show greater differences between silent and oral reading than do normal speakers. Disturbances in eye movements coincident with speech mechanism disturbances were found. This fact suggests a general disequilibrium of the nervous system as a whole during stuttering. Photographic records of eye-movements during speech spasms may be a means of differentiating types of spasms and possible types of stutterers. The automatic or reflex type of eye-movement found during stuttering suggests a relative decrease in the control of cortical over sub-cortical centers. "Stuttering is a temporary recurrent reduction in the dynastic control of the superjacent levels over their substructures, causing general disequilibrium of the orientation potentials within the nervous system."—S. Renshaw (Ohio State).

3992. Junod, H. A. Le sacrifice dans l'ancestralité sud-africaine. (Sacrifice in South African ancestorolatry.) *Arch. de psychol.*, 1932, 23, 305-335.—Before trying to arrive at a single explanation of the various theories on sacrifice, Junod insists that we take into consideration the particular theology underlying each religion. He bases his discussion on elaborate investigations which he made on the Thonga tribe (Bantus). He considers the whole social system as well as the mystical forces involved in the ancestor worship. The ancestors do not attain any moral superiority through their deification, but retain all their former faults and virtues, the essential factor of the sacrifice being that they must not be forgotten. The means taken by the Thongas to protect themselves from these mystic forces or to render them favorable are of two kinds: the *mouri*, a sort of procedure which acts mechanically or automatically on certain impersonal forces, and the *mhamba*, which is a presentation of a religious object

or the accomplishment of a symbolic act affecting the special, personal forces. The author describes a number of these ceremonies involving the family (marriage, death, etc.), the clan (the offering of the first-fruits), etc. He formulates his definition of sacrifice as practiced by the Thongas as follows: the sacrificial rite is a religious act which consists in the offering of a symbolic object, accompanied by a vow or prayer, in order to maintain or reestablish favorable dispositions in the deified ancestors toward the health and prosperity of their descendants. Material benefits only are considered, since there is no connection between morals and religion in ancestorolatry, due to the fact that the dead ancestors do not assume any moral superiority. None of the theories satisfactorily explain the findings for this tribe, not even that of Berguer, which states that the sacrifice is a projection into the world of objective realities of a psychological conflict resulting principally from an aspiration to a new birth, for, at the level of religious evolution found in the Thonga tribe, there is no ideal beyond that of a purely material happiness involving the individual and the group.—M. R. Lambercier (Geneva).

3993. Karpeles, L. M. A further investigation of the Porteus Maze Test as a discriminative measure in delinquency. *J. Appl. Psychol.*, 1932, 16, 427-437.—The present study is an outgrowth of a similar investigation made by Poull and Montgomery at the New York City Children's Hospital on Randall Island. The earlier study used data from subjects of the lower levels of intelligence; the present study uses groups from the normal and upper levels. The control group of 185 socially adjusted children tends to make a significantly higher average on the Mazes than on the Stanford-Binet, while the socially maladjusted group shows no significant difference in performance on these two tests. In comparing the average on the Porteus Mazes made by the socially adjusted subjects with that of the maladjusted subjects we find that the adjusted group makes a significantly higher average than the group of delinquents and that this difference is completely reliable. The difference in favor of the socially adjusted is even more marked and more highly reliable with those subjects on the higher levels of intelligence (IQ of 80 or over).—E. H. Kemp (Clark).

3994. Lorenzoni, M. Eine jugendliche Diebin. (A young girl thief.) *Vjsch. f. Jugendk.*, 1933, 3, 46-47.—The author reports a case of sudden character change at puberty in an illegitimate girl of low-grade mentality.—M. Lee (Chicago).

3995. McDermott, J. F., & Taft, K. B. Sex in the arts, a symposium. New York: Harper, 1932. Pp. 346. \$3.50.—R. R. Willoughby (Clark).

3996. Morgenthaler, W. Ueber verbrecherische Psychopathen. (Delinquent psychopaths.) *Schweiz. Zsch. f. Strafrecht.*, 1932, 46, 416-464.—This is a report of a committee of the Swiss Psychiatric Society, dealing with the question of psychiatric and psychotherapeutic treatment in correctional institutions. The conclusions are as follows: The interest of society demands special treatment of psychopathic delin-



quents, and in particular a psychotherapeutic approach, if thereby a considerable proportion of them can actually be cured, improved, or simply made less troublesome. Although the initial outlay would be great, it would be very short-sighted, even from a financial standpoint, to support in institutions during their entire lives persons who might be cured or at least be made less antisocial. A large group of psychopathic delinquents, however, are inaccessible to any kind of psychotherapy, and for these custodial care alone is sufficient. But for the great majority, a well-directed and energetic therapy is strongly indicated. In the first place, a modern correctional institution has in itself a therapeutic effect. There is no special kind of psychotherapy for delinquents. The individualized approach to the case must determine the appropriate methods. The report considers also the legal sanctions necessary to a psychiatric program in correctional institutions. The new Swiss code is favorable to this, and has even now brought about more intensive psychotherapeutic efforts. A closer connection with outside psychiatric clinics and the establishment in such institutions of clinics under psychiatric direction are needed.—*M. E. Morse* (Catonsville, Md.)

3997. Ogden, C. K. *The Basic dictionary*. (2nd ed.) London: Kegan Paul, 1932. Pp. xx + 106. 2-6.—A list of the 7500 "most useful" words of standard English with their equivalents in Basic. A preface discusses the principles of the latter.—*R. R. Willoughby* (Clark).

3998. Ogden, C. K. *The Basic words*. London: Kegan Paul, 1932. Pp. viii + 96. 2-6.—A list of the 850 Basic forms and international, complex, and onomatopoeic words, with pronunciation, French and German equivalents, and illustrations of use.—*R. R. Willoughby* (Clark).

3999. Paterson, D. G., & Tinker, M. A. *Studies of typographical factors influencing speed of reading. VIII. Space between lines or leading*. *J. Appl. Psychol.*, 1932, 16, 388-397.—A special arrangement of the Chapman-Cook Speed of Reading Test was employed and shown to yield equivalent scores on Forms A and B. Thus varying amounts of leading could be inserted in Form B, and scores on B compared with performance on Form A, set solid. 400 college students were used, none of whom had previously taken the tests. It was found that: 1-point leading does not facilitate speed of reading as compared with text set solid; 2-point leading facilitates speed of reading by 7.5%; 4-point leading facilitates speed of reading by 5%. 10-point type and 19-pica line width were employed as printing specifications, and it may be that the advantage of two-point leading may hold only for this size of type and width of line.—*E. H. Kemp* (Clark).

4000. Paterson, D. G., & Tinker, M. A. *Studies of typographical factors influencing speed of reading. X. Style of type face*. *J. Appl. Psychol.*, 1932, 16, 605-613.—Ten type faces were compared with respect to their effect on reading rate. Ten groups of 90 college students were tested—a total of 900 subjects.

No important differences in rate of reading text material were found when the following type faces were used: Scotch Roman; Garamont; Antique; Bodoni; Old Style; Caslon O. S.; Kabel lite; and Cheltenham. Text printed with American Type-writer type was read 5.1% more slowly than text printed with Scotch Roman type. Cloister Black type (Old English) retards speed of reading 16.5%. Type faces in common use are equally legible.—*E. H. Kemp* (Clark).

4001. Prahács, M. *Forma és kifejezés a zenében*. (Shape and expression in music.) *Athenaeum*, 1932, 18.—Musical form is musical language, the science of harmony and form being its grammar, teaching the laws and construction of music. The units attributable to melodic, rhythmic, and harmonic relations are not primarily units of sound but of movement, whose substance is founded in the changes of tensions and relaxations, in the action of centripetal and expansive forces.—*P. Ranschburg* (Budapest).

4002. Rheine, T. V. *Die lesbische Liebe. Zur Psychologie des Mannweibes*. (Lesbian love. The psychology of the masculine woman.) Berlin: Aris & Ahrens, 1933. Pp. viii + 104. RM. 6.—"Similarity of pleasure-curves" (*Lustkurven-Gleichheit*) as the homosexual stimulant is suggested by way of theoretical viewpoint from which to study the physiology of lesbian love. The constitution of the lesbian is of especial importance for such a study. The psychology of masculinity in women reveals a clear heterosexuality. Attention is also devoted to sadism and masochism. The modes in which lesbianism appears also are reviewed and an account of their social aspects given. A statistical treatment of these data is presented. The book throughout maintains that lesbianism is not a perversion of normal sensibilities.—(Publisher's abstract).

4003. Richards, A. I. *Hunger and work in a savage tribe*. London: Routledge, 1932. 6/.—*R. R. Willoughby* (Clark).

4004. Robicsek, H. *Sprache, Mensch und Mythos. Einführung in die Differentialanalyse der Sprache*. (Language, man and myth. Introduction to a differential analysis of language.) Leipzig: Deuticke, 1932. Pp. 172.—The author proposes to study his problem by means of a physiological and ethnological approach. Resembling in some respects the traditional "phonology" of the "functional science of language," but much more radical in method, attention is focused primarily upon the fact of inter-lingual "homonymy" (i.e. cases of identity in the sound (*Gleichklang*) of words taken from different languages). "Homophone" refers to words in which only the initial sound (*Anklang*) is identical. Numerous examples are given. The range of meanings exemplified by homonymous words is sometimes very great. Nevertheless it is possible to discover certain characteristic groupings among the various homonymies themselves, and it is this which the author finds especially interesting. Indeed, the meaning-groups are found to fall into regular pairs of the order of master-and-servant, horse-and-rider, etc., and in

this the author believes that in language is disclosed the ultimate mythos (*Urmythe*) of humanity.—A. Wellek (Leipzig).

4005. Robinson, E. S. Are radio fans influenced? *Survey*, 1932, 68, 546-547.—A group of 419 persons scattered in fifteen states were tested before and after having heard four certain speeches on unemployment. Changes in opinion were compared with changes in opinion of a control group. Listening to the talks increased the number of favorable judgments, decreased the frequency of doubt, and had little effect on rejections. There was little change of any kind in the control group. Those ideas spread most readily which are already well established in the group.—(Courtesy *Amer. J. Sociol.*)

4006. Robinson, F. P. The role of eye movements in reading with an evaluation of techniques for their improvement. *Univ. Iowa Stud.: Ser. Aims Prog. Res.*, 1933, No. 39. Pp. 52.—The role of habits of eye movement in determining the relationship between eye movements and comprehension was studied. Training of such a nature as to increase the efficiency of eye movements was given to 21 college freshmen. Marked gains were found in the efficiency of eye movement, rate of reading, and ability to score on general reading tests. To ascertain that the gains were not due to extraneous factors in the training situation, each of the following factors was evaluated experimentally: maturation, uncontrolled training in comprehension, possible skimming, motivation, adjustments to the experimental situation, and the validity of eye-movement photography. The next step was to show that improvement in ability to comprehend, to perceive, and to sense did not account for the gains. It was found that training improved eye-movement habits, which in turn increased reading efficiency. Among the distinguishable habits of eye movements are the width of fixation, the nature of the return sweep and the manner in which the eyes move spatially and temporally through a given selection. In its most efficient form, this latter habit is characterized by consistent forward movement with stops of equal duration, while less efficient habits result in many regressions and fixations of long duration. Although training in eye movements and training in comprehension improve general reading ability to about the same degree, the ability to comprehend is probably a more important determiner of reading ability than eye-movement habits, because the former does not respond so well to training. Recommendations for clinical procedure are given.—B. Wellman (Iowa).

4007. Rocholl, C. Untersuchung über den Intelligenzstand sprachkranker Kinder der Aufnahme-klasse einer Berliner Sprachschule nach der Methode Binet-Simon-Bobertag. (A study by means of the Binet-Simon-Bobertag method of the intelligence of children with speech defects who were admitted to a Berlin school of speech correction.) *Hilfsschule*, 1932, 25, 415-419.—The method of Binet-Simon-Bobertag was found to be particularly suitable for this inquiry because the verbal report of problem

solutions provides a very useful means of determining the nature of speech defects themselves. The experimenter thus divided his attention between observing the solutions obtained and noting the answers which the children gave when questioned.—W. Nolte (Berlin).

4008. Rohden, F. v. Methoden der Kriminalbiologie. (The methods of criminal biology.) *Handbuch d. biol. Arbeitsmethoden*, 1933, Abt. IV, Teil 12, 581-829.—This is the first time that an attempt has been made to present an exhaustive, methodological and critical résumé of criminal biology. This field may be thought of as a subdivision of human biology; it seeks to describe the criminal as an entirety (*Ganzheit*) particular emphasis being placed upon "criminoplastic" dispositions. In this, criminal biology proceeds along the lines of a study of human constitutions. The work should be undertaken only by the psychiatrist, although he will undoubtedly need the assistance of psychology, sociology, anthropology, and criminology. Bibliography.—P. Plaut (Berlin).

4009. Rüssel, F. Beiträge zur allgemeinen Formlehre des Helfens. (Contributions to the general theory of types or forms of assistance.) *Hilfsschule*, 1932, 25, 393-414.—Assistance depends upon a specific apprehension of need. A helpful act is determined in character by the psychophysiological power of the person rendering assistance—in so far as this is relevant to the exigencies of the given case. The concept "helpfulness" (*Helfen*) must be distinguished from that of "support" (*Unterstützen*). The latter refers to assistance given as a contribution enabling the recipient to pursue his life upon a higher level than would otherwise have been possible. Helpfulness, on the contrary, is involved when the assistance comes as a rescue from conditions which had threatened existence itself. Helpfulness takes the forms: (1) of physical intervention; (2) of placing one's possessions at another's disposal; (3) of influencing other people on behalf of the needy person; (4) of sympathy and spiritual cooperation; (5) of faith (although there is in this last type a strong element of self-help which introduces certain new factors).—W. Nolte (Berlin).

4010. Sander, F. Gestalt und Sinn. I. Gestalt-psychologie und Kunsttheorie. (Gestalt and meaning. I. Gestalt psychology and esthetic theory.) *Neue psychol. Stud.*, 1932, 4, 319-414.—Through an analysis of renaissance and baroque architecture the author seeks to show how these disclose certain traits of human nature as expressed in "structuralized fantasy." His intention in this is to investigate the application of certain Gestalt laws. The distinction which Wölfflin has made between these styles—the beautiful, peaceful "being" of renaissance and the tense, restless "becoming" of baroque—is familiar to psychology, and illustrates very aptly certain Gestalt conditions which a study of geometrical figures and of symmetry has already brought to light. The forces created by a work of art are already effective in the most unassuming perception. In renaissance architecture the Gestalt-process (*Gestalt-*



ungsvorgang) is allowed to ripen and attain its own completion, the beautiful Gestalt. Baroque, on the other hand, carries the process only far enough to suggest an end or completed state, but leaves unresolved the tensions it excites.—H. Burkhardt. (Leipzig).

4011. Simpson, R. M. The mechanical aptitudes of 312 prisoners. *J. Appl. Psychol.*, 1932, 16, 485-497.—During a recent occupational survey at the Illinois State Penitentiary the Stenquist Mechanical Aptitude Test (Form 1) was used. By means of an Occupational Inventory of each individual in the superior and the inferior quartiles, it was possible to ascertain whether or not the first job, last job, longest job, or father's occupation had been of a mechanical nature. The conclusion is reached that experience gained through mechanical trades does improve one's mechanical ability as measured by the Stenquist Test; that high scores and low scores on the Stenquist Test are significant indicators of the presence or absence of mechanical aptitude; and that the Stenquist Test used in conjunction with an occupational inventory and an intelligence test provides a simple and useful device for ascertaining mechanical aptitude in adults.—E. H. Kemp (Clark).

4012. Skawran, P. On the regeneration of the white race in South Africa. (An open letter to Dr. C. L. Leipoldt.) *So. Afric. J. Psychol. & Educ.*, 1932, 1, 1-6.—A reply to a news item by Leipoldt, who presumably therein contended that the white man in South Africa is degenerating. The author attempts to adduce evidence, relating to the main in physique and health, to demonstrate the contrary.—O. L. Harvey (Cambridge).

4013. Skorpil, R. Polarität und Rhythmus in der Menschheitsentwicklung. (Polarity and rhythm in human development.) *Psychol. Rundschau.*, 1933, 4, 271-278.—Ligeti's thesis of rhythm in human development can also be applied to the phases of world cultures. Three such waves have been apparent. A comparison is made of Ligeti's analysis and that of Spengler. The analyses of world civilizations made by others are also contrasted and discussed.—A. B. Herrig (Michigan Central State Teachers College).

4014. Smith, M. Degrees of social intimacy. *Sociol. & Soc. Res.*, 1933, 17, 324-330.—It is possible to determine the degree of intimacy of various types of social relationship. The author cites an experiment in which 16 statements were presented to 65 college students for ranking. From the results it was possible to give an average intimacy rank to these relationships ranging from 1.06 for marriage to a score of 14.18 for a resident in the same country without citizenship. All distinguishable intimacy ideas need to be collected and ranked by two or three hundred judges so that each average ranking would indicate completely and with reliability the relative intimacy of each social relationship.—J. R. Hilgard (Yale).

4015. Suttie, L. D. Religion: racial character and mental and social health. *Brit. J. Med. Psychol.*, 1932, 12, 289-314.—The religious history of Europe from the Teutonic myths through the various stages

of Christianity is studied in order to reveal the repression basis of the races producing the culture and religion of each stage. The author is convinced on the basis of the evidence presented in the paper and its seven appendices that an Oedipus-free culture is possible.—E. R. Hilgard (Yale).

4016. Svensrud, M. Attitudes of the Japanese towards their language schools. *Sociol. & Soc. Res.*, 1933, 17, 259-264.—Language schools to teach the Japanese children their own language, traditions, and history supplement the American public schools. Due to lack of interest on the part of the children and a realization by the parents of their passing importance, the influence of these schools upon attitudes is already negligible.—J. R. Hilgard (Yale).

4017. Telgher, A. L'esthétique de Marcel Proust. (The esthetics of Marcel Proust.) *Rev. phil.*, 1933, 58, 128-132.—The esthetics of Proust are neither platonic nor Bergsonian. His art leads to sensation-memory. For him art is a full life, concrete and individual, which at the same time no longer lives, no longer is present, and is no longer active. This life, enclosed as it is in itself, has need of nothing, and is plenitude and absolute joy.—Math. H. Piéron (Sorbonne).

4018. Tinker, M. A., & Paterson, D. G. Studies of typographical factors influencing speed of reading. IX. Reductions in size of newspaper print. *J. Appl. Psychol.*, 1932, 16, 525-531.—Forms A and B of the Chapman-Cook Speed of Reading Tests were printed using Mergenthaler's Ionic newspaper linotype, 6½ point on 7-point body. Reproductions by the planographic offset-printing process were made at original size and at various reductions (80, 50, and 30% of original size). When the curve showing average loss of legibility in words read per second for the various reductions in size is examined, we find that it shows a sharp drop (indicating decreased legibility) just beyond a size reduction of 50%. The conclusion is reached that reductions of this type to half-size may be made without undue loss of legibility.—E. H. Kemp (Clark).

4019. Troisier, J. Menhirs, trilithons, and dolmens. Their symbolism. *Brit. J. Med. Psychol.*, 1932, 12, 337-342.—An interpretation of megalithic monuments: menhirs symbolize the male, trilithons the female, dolmens fecundity (typifying the maternal genital organ). The Arc de Triomphe in Paris is a colossal dolmen.—E. R. Hilgard (Yale).

4020. Veit, O. Gefühl und Vernunft in der Wirtschaft. (Emotion and reason in economics.) Berlin: Hobbing, 1932. Pp. 136. RM. 3.60.—Where is the boundary in economic theory and practice between the rational and the irrational? The illustration proposed is that of international trade. The conflict of economic logic and national vanities (prestige, etc.) serves to throw the problem into especially sharp relief. The author nevertheless believes that a solution of this antagonism can be found. He shows that violations of logic do not work to the best interests of emotional demands. It follows that in matters of international trade feelings and reason should be

rigidly separated. "It is very doubtful whether mankind is prepared to pay for its feelings. Indeed it is far more likely that it is not even aware in most cases of what the price would be." The book is in line with the thoughts of Max Weber and certain of his followers. The mode of attack (national economy and psychological inquiry) is new, however.—O. Veit (Berlin).

4021. Weitershausen, P. *Meine Zigeunerklasse in Köln.* (My gypsy class in Cologne.) *Hilfsschule*, 1932, 25, 282-299.—The author begins with a brief history and description of the gypsy. This discussion is based both upon his own observations (3 years) and upon a review of the relevant literature (especially Engelbert Witlich, the gypsy author). Communications received from another first-hand observer are also reported. The school included boys and girls 6-14 years of age. Some of these pupils were wholly untrained in school procedure and without any knowledge of German; some had already had experience of this sort, but were nevertheless lacking in school ability. It was found, however, that languages were readily learned. The general intelligence of this group was for the most part normal. Their ability in arithmetic was above normal, which seems natural enough when one considers the type of life these people live. Discipline in the school proved to be far more difficult than instruction itself, however. This does not mean that gypsy children are insensible to the common virtues. They are loyal, rarely wilful in their disobedience, and almost never cheat in school. They love their parents and teacher and are ready to give help wherever necessary. They are profound animal lovers and display a most happy disposition. The author believes that religious and ethical teaching, especially through good example and sympathy, would eventually arouse in them the motives necessary to permit their assimilation by society.—W. Nolte (Berlin).

4022. White, W. A. *Crimes and criminals.* New York: Farrar & Rinehart, 1933. Pp. viii + 276.—A general and semi-popular treatise on the criminal. The central viewpoint is that the criminal is a sick man and should be treated accordingly. The concept of punishment based upon assumptions of individual responsibility should be banished. Anti-social conduct should not be met in kind, but should be met by the automatic segregation of the offender in an adequately supervised institution where he is treated by such methods as will make him feel that his conduct had led naturally to such results, that he can get back into the world of free men by modifying his conduct, and that the institution exists to help him accomplish this.—V. Jones (Clark).

4023. Wullen, H. H. *Inborn qualities of the human voice.* *Eug. News*, 1931, 16, No. 10.—R. R. Willoughby (Clark).

4024. Young, P. V. *The new poor.* *Sociol. & Soc. Res.*, 1933, 17, 230-233.—Studies made recently for the California State Unemployment Commission revealed that many people applying to relief agencies were idle through no fault of their own and were

developing new behavior patterns and new social types. Finding the traditional attitudes and social values unsuitable in the new situation, they undergo a period of doubt, bewilderment, fear, and eventually indifference. Existing agencies are not geared to cope with this problem.—J. R. Hilgard (Yale).

[See also abstracts 3602, 3687, 3770, 3805, 3873, 3930, 3977, 4049, 4054, 4055, 4062, 4064, 4067, 4076, 4080, 4090, 4091, 4110, 4113, 4114, 4116, 4125, 4178, 4200, 4211.]

## INDUSTRIAL AND PERSONNEL PROBLEMS

4025. [Anon.] *Quelques données pour l'unification de la terminologie psychotechnique.* (Suggestions as to the unification of psychotechnical terminology.) *Travail Humain*, 1933, 1, 68-70.—Report of a committee appointed at the Psychotechnical Congress at Moscow, 1931, to suggest unified terminology. Suggests a definition for such terms as the following: centile, error, variation, deviation, reliability, validity, etc.—H. E. Burr (Ohio State).

4026. [Anon.] *Unificació del vocabulari psicotècnic.* (Standardization of the psychotechnical vocabulary.) *Rev. de psicol. i ped.*, 1933, 1, 91-92.—This is a translation into Catalan of the official definitions of the Committee on Standardization of Terminology of the Psychotechnological Congress at Moscow in 1931.—M. E. Morse (Catonsville, Md.).

4027. Claparède, E. *Le test du chef de gare.* (A test for station masters.) *Arch. de psychol.*, 1932, 23, 336-343.—The test was compiled for selecting station masters for small federal railroad stations. These men must be in full charge for a certain part of the day, their work involving a dozen different duties, some of which must be carried on simultaneously. So far the test has not been given a practical demonstration, as it has been tried out only in two cases: on 45 Geneva students and on 96 women instructors in Brazil. The subject had to number the letters of a disarranged alphabet while watching a second chronometer. Each time that the needle returned to zero or a period of 20 sec. elapsed after the sounding of a bell, the subject had to write certain previously indicated symbols. The experiment lasted four minutes and was preceded by a trial period. The author calculated achievement by the number of letters numbered correctly, and accuracy by the total amount of delay in reaction in writing the symbols. The reliability coefficient was given as approximately  $r = .80$  for both groups of tests. No parallelism was found between the achievement and accuracy rankings. Four groups of approximately equal distribution were found: rapid and accurate subjects; rapid and inaccurate; slow and accurate; and slow and inaccurate. Applicants should be selected who rank highest in performance and have least delay in reaction time.—M. R. Lambercier (Geneva).

4028. De Inza, C. *La psicotécnica en los ferrocarriles.* (Industrial psychology in railway systems.) *Rev. de psicol. i ped.*, 1933, 1, 38-61.—This is a critical review of the aims, methods, limitations, and



good results of industrial psychology in general, as well as its applications to railway organizations. This field presents peculiar difficulties because all innovations must be subordinated to immediate safety. The discussion is concerned particularly with tests for the selection of employees, which must precede scientific organization of work (rationalization) and will to some degree automatically produce it. Such tests are desirable, but they should be introduced gradually as a part of a larger scheme, and, in the present economic crisis, be limited to workers directly concerned with traffic. Tests should include not only intelligence but, even more important, aptitude. Fundamentally, in order that industrial psychology may produce its best results both in selection of personnel and organization of work, it must be considered as only one of many factors, although the most efficient one, in a general "rationalization" of any industrial system. It is not something entirely new, but an evolution and refinement of efforts which date at least as far back as the industrial revolution. A summary of the state of development of railway psychotechnics in European countries is given, also some pertinent researches made by street railway companies in the United States. The article includes tables and a bibliography.—*M. E. Morse* (Catonsville, Md.).

4029. Dorcus, R. M. Habitual word associations to colors as a possible factor in advertising. *J. Appl. Psychol.*, 1932, 16, 277-287.—131 male students of the Johns Hopkins University and the University of Maryland were used as subjects. Red, orange, yellow, green, blue, and purple were presented, and the students were required to write down the first word they thought of other than the name of the color itself. When this was finished the colors were again presented and the subjects were asked to write down the name of each color. About eight weeks later each individual was given a list containing the words which he had written in response to the colors and asked to give word associations. It was found that individuals tended to associate the same color with the word which has been associated previously with that color. This is especially true with saturated colors. In the unsaturated series blue was the only color which was given by a large majority of subjects in response to the association words formerly obtained. It was found also that there is little relation between the number of times a given word has been associated with a given color and the number of times that that color will be given in response to that word.—*E. H. Kemp* (Clark).

4030. Evans, J. E., & Bernd, H. D. Automobile accidents and the city railway. *J. Appl. Psychol.*, 1932, 16, 577-583.—Of 1,156 accidents in which a city street car and an automobile were involved, most were confined to or peaked into three periods, 7 to 9 a.m., 4 to 7 p.m., and 9 to 11 p.m. More accidents occurred during the second period than during any other period. Most fatal accidents occurred during the early morning hours, from about 3 to 5 a.m. Only a very small number of taxicabs were involved

in the accidents, although a large number of taxicabs were always on the streets. Of the 1,156 accidents 4.4% involved women. Estimate from count of cars passing certain points at certain periods of the day indicated that 16.3% of the cars on the street were driven by women.—*E. H. Kemp* (Clark).

4031. Farmer, E., Chambers, E. G., & Kirk, F. J. Tests for accident proneness. (Industrial Health Research Board Report No. 68.) London: H. M. Stationery Office, 1933. Pp. 37. 0/9.—Five groups of dockyard and R.A.F. apprentices with similar age ranges and significantly different accident rates were given tests, mainly of a visuo-motor order, and their subsequent accident rate was compared with the test performances. In two groups the accident rate was found not to decrease with age and experience. In these groups no tests had any significant relation with accident rate. In the other groups a small association was found between success in the tests and a low accident rate. The association was closest in the group whose accident frequency distribution differed most from chance, in which the stability of accident incidence was greatest, the accident mean the highest and the range of accidents the greatest. No significant relationship was found between intelligence and accidents in any group. The relation between the psychological functions involved in the tests and accident proneness is gross, so that only extremes of goodness and badness in the test scores are positively related to differences in the accident rates. It is shown that the application of the tests reduces accidents in each of the groups concerned.—*F. C. Bartlett* (Cambridge, England).

4032. Gaudet, F. J., & Zients, S. B. The history of full-page advertisements. *J. Appl. Psychol.*, 1932, 16, 512-514.—A supplement to and revision of the work of Harry Dexter Kitson. The authors, in continuing this experiment, have investigated and completed the years which Kitson left unfinished and have added the years since the publication of the latter's book *Scientific Advertising*. The *Literary Digest* was taken as a representative general magazine. The proportion of full-page advertisements in it showed a seven-fold increase during the decade 1910-1920, a decline during 1921-1923, a rise during 1924-1926, and a sharp drop followed by partial recovery since that time.—*E. H. Kemp* (Clark).

4033. Gemelli, A. Observations sur la selection des pilotes aviateurs. (Observations on selection of aviation pilots.) *Travail Humain*, 1933, 1, 1-23.—Tests are divided into those which reproduce the job exactly, those which are analogous to the job, those which are analytical, and those which are purely empirical. The writer found the first two unsatisfactory in his own experience, and has devoted his efforts to the analytical type. Several tests are described briefly, and it is suggested that study of the emotional phases would be profitable.—*H. E. Burt* (Ohio State).

4034. Jaederholm, G. A. Psychotechnik des Verkaufs. (Psychotechnique of selling.) Leipzig: G. A. Gloeckner, 1926. Pp. 168. RM. 7.85.—The author

uses mostly American material in his presentation of the psychology of selling. He discusses merchandising, salesmanship, and the buyer. The form of the presentation indicates that the book is intended not only for psychologists but also for the practical business man.—*K. F. Muenzinger* (Colorado).

4035. Keller, H., & Weber, C. O. Germany's elimination test for dentists. *J. Appl. Psychol.*, 1932, 16, 465-475.—At present all persons seeking to prepare for the dental profession in Germany must take and successfully pass a battery of tests. The tests are given by psychologists and are divided into six major divisions, as follows: tests of sensory acuity, tests of manual skill, tests of general intelligence, tests of practical intelligence, tests of form of work, and tests for the determination of educational level. The actual tests used in each division are listed in the article. There is generally good agreement between test results and professors' ratings of dental students.—*E. H. Kemp* (Clark).

4036. Lahy, J. M. Les fondements scientifiques de la psychotechnique. (The scientific fundamentals of psychotechnics.) *Encéph.*, 1932, 27, 273-302.—Psychotechnics is a science which allies theory and practice most intimately. After having raised the question whether applied psychotechnics is simply an applied science or a science at the same time theoretical and applied, the author shows the fundamental object, the general laws, and the two conceptions of personality. He then reviews the methods of psychotechnics.—*Math. H. Piéron* (Sorbonne).

4037. Lahy, J. M. Sur la validité des tests exprimée en "pourcent" d'échec. (Validity of tests expressed as per cent of agreement.) *Travail Humain*, 1933, 1, 24-31.—The per cent of applicants accepted on the basis of a test who make good on the job is compared with the per cent correct selection which is desired. The latter should not be less than the former minus its standard deviation. If it is less, the selection is declared poor on the basis of the test in question.—*H. E. Burt* (Ohio State).

4038. Ledgerwood, R. Measurement of the appeal of performances in the theater. *J. Appl. Psychol.*, 1932, 16, 403-405.—17 graduate students and faculty members attended a performance of Nikita Balieff's *Théâtre de la Chauve Souris*, scenes from which were afterwards ranked in order of their general pleasingness by these subjects. The names by which the 19 acts of the program were described were taken individually and the nature of each scene reviewed so that there might be no doubt concerning the identification of them. The mean ranks of each scene, the variability of the means, and the range of error for each are given in tabulated form. It is found that the means are in general precise only to within about two rank points.—*E. H. Kemp* (Clark).

4039. Lipmann, O. Zur statistischen Untersuchung der Auswirkung von Tauglichkeitsauslesen. (Concerning the statistical investigation of selection according to aptitude in practice.) *Zsch. f. angew. Psychol.*, 1932, 43, 348-352.—The author suggests the use of a "coefficient of selection" which represents

the relation of the number of chosen applicants to the total number of applicants when aptitude tests have been used and a certain efficiency is expected. Knowing the coefficient of selection, we can predict the number of applicants necessary to furnish a required number of workers who will have the expected efficiency.—*K. F. Muenzinger* (Colorado)

4040. Manning, W. H. O'N. Estudi psicologic del medi físic dels obrers. (Studies on the psychological influence of physical conditions of work on employees.) *Rev. de psicol. i ped.*, 1933, 1, 22-37.—This is a translation into Catalan of an article by Manning. The original reference is not given. The author illustrates the psychological importance of working conditions by describing the improvements advocated by the National Institute of Industrial Psychology (London). He gives practical rules for different types of industrial organizations, considering especially lighting, ventilation, temperature, and proper space and convenience for work. In connection with a sketch of Taylor and Gilbreth's contributions, he describes briefly the methods of making time and motion studies. He also discusses the adaptation of the machine to the human capacities of the worker; "predisposition" to accidents; and the question of monotony.—*M. E. Morse* (Catonsville, Md.).

4041. O'Connor, J. School difficulties of the man with executive characteristics. *Harvard Teach. Rec.*, 1933, 3, 81-90.—From the test results of successful executives, the author believes the characteristics of good executives are: (1) an objective personality; (2) possession of a wide range of aptitudes; (3) an accounting or clerical aptitude; (4) a large vocabulary; (5) an outstanding aptitude for the type of work in which the executive began his career. Evidence and argument are offered in support of these views. Educational implications are made.—*S. M. Stoke* (Mount Holyoke).

4042. Probst, J. B. An experimental test in evaluating the most essential qualifications for the position of "office clerk." *J. Appl. Psychol.*, 1932, 16, 644-650.—To determine whether persons of good judgment and experience can substantially agree as to the essential qualifications for a position, a questionnaire was filled out by thirty judges. Results indicate that human judgment taken individually is just as likely to be highly erratic as it is to be highly consistent, but that the pooling of a number of judgments does produce a fairly satisfactory degree of reliability and consistency.—*E. H. Kemp* (Clark).

[See also abstracts 3817, 3919, 3924, 3964, 4011, 4103, 4205.]

## CHILDHOOD AND ADOLESCENCE

4043. Abbott, G. The child. *Amer. J. Sociol.*, 1933, 38, 880-888.—The year 1932 saw better organization of relief resources and greatly increased expenditures—78% in 1932 for 124 cities. The plight of large numbers of homeless minors has become serious. Although the general trend of the infant mortality rate has continued downward, impairment



of the health of many children through malnutrition is indicated. While total numbers show decline in juvenile delinquency, analysis of offenses suggests that conduct problems have become more serious. Child labor on the whole has shown a decrease for 1931; figures for 1932 are not yet available. Few legislative measures were passed during 1932 relating to other subjects of social welfare than relief of unemployment and curtailment of expenditures.—(Courtesy *Amer. J. Sociol.*).

4044. Alschuler, R. H. *Two to six*. New York: Morrow, 1933. Pp. 160. \$1.50.—The pre-primary faculty of the Winnetka schools offers this collection of suggestions to parents. Simplified directions for training in personal and social habits at different ages are given, and a model daily program. There are lists of books of stories and poetry (including books to be found in ten-cent stores); songs and victrola records which have been found desirable; music for appreciation and for rhythms; play materials for indoors and outdoors; and suggestions for suitable excursions, all classified for age groups. The bibliography lists and describes books for parents.—*M. P. Montgomery* (Faribault, Minn.).

4045. Armstrong, C. P. *Sex differences in the mental functioning of school children*. *J. Appl. Psychol.*, 1932, 16, 559-571.—These groups of boys and girls, compared on the basis of mean IQ's, do not differ reliably in general intelligence as measured by these particular scales as a whole: the Otis Test, the Army Individual Performance Test, and the Army Beta Test. The boys and girls show only a negligible difference in reactions at each age level on the three scales, but when a difference is present it is usually in favor of the boys. There is no evidence of earlier maturing of girls. There is a reliable difference on specific items of the performance scales, the boys being superior with the mazes, ship, cube analysis, picture completion and geometrical construction. There is an indication of superiority of the girls with the digit-symbol, number-checking and X-O tests.—*E. H. Kemp* (Clark).

4046. Arouet, A. *Les étapes de la vie enfantine décelée par les yeux*. (The stages of infant life, as revealed by observation.) *Ann. de l'enfance*, 1932, 6, 1165-1171.—The child who plays is intensely serious and delivers himself over entirely to his free activity. He is conscious of realizing himself integrally, and that is his real reason for playing. The child's taste for games transforms itself, changes in object, and evolves parallel to the individual. The nature of each one scarcely varies, and at each period the tendencies which condition the personality may be found. They are emphasized or lose emphasis simply, according to the age, the feelings of the subject, and the circumstances in which he is placed.—*Math. H. Piéron* (Sorbonne).

4047. Benedict, F. G., & Meyer, M. H. *The basal metabolism of American-born Chinese girls*. *Chinese J. Physiol.*, 1933, 7, No. 1, 45-60.—18 American-born Chinese girls (12 to 22 years old), living in Boston, United States of America, were measured in the

morning in the post-absorptive condition with the helmet respiration apparatus and found to have a basal metabolism averaging 9.2% lower than that of American Girl Scouts of the same age, and 6.1% lower than the Aub and Du Bois standards for American girls of this age range. The pulse rates likewise were somewhat lower than those observed with American girls. The authors believe that this investigation tends to support the existence of a racial factor in metabolism.—*C.-F. Wu* (Nat. Res. Instit. Psychol., Shanghai, China).

4048. Blackfan, K. D. *Growth and development of the child. Part I: General considerations*. (White House Conference report.) New York: Century, 1932. Pp. xviii + 377. \$3.00.—To secure for each child the best environment for him requires a study of his heredity, capacities, and reactions. This study begins with consideration of the well-born child, prematurity, and human type. A neglected field of research is the gradual development of the automatic stabilizing controls (water and temperature balance, circulation, etc.) and their relation to the emotional stability of the child. The heat-regulating mechanism becomes effective in proportion to the demands habitually made upon it. During sleep there is a drop in blood pressure and pulse rate, and a diminution in reflexes and most of the secretions. Children should be taught not to permit factors in environment to interfere with sleep. Acute muscular fatigue prevents sleep. There are no standards by which to judge the suitability of tasks for any given age or strength group. Tests designed to measure fatigue are unreliable. The question of chronic fatigue in the school child needs investigation. It is suggested that in school-age athletics emphasis be placed upon types of exercise that may be continued in later years; and that equality of contestants be secured by determining the individual's strength index. Good body mechanics (posture) may favorably influence health and growth. While light is beneficial to health and has curative power in many diseases, it should be emphasized that it in no way replaces a sound hygienic regimen. In excessive amounts it may be very harmful. Exposure to weather conditions, as in open-air schools of the extreme type, is dangerous in winter, but of great value in favorable weather. During infancy and early childhood diseases dependent upon poor hygiene and improper food occur much more commonly than in later life. To evaluate the influence of socio-economic factors upon growth a series of studies including different ethnic and environmental groups is needed. It has so far been indicated that American children are superior in size to European; that war leads to reduction in birth weights; that the importance of housing has been over-emphasized; and that there is no evidence that institutional life is preferable to life in an intelligent home.—*M. P. Montgomery* (Faribault, Minn.).

4049. Boenheim, C. *Onanie und Nervensystem beim Kinde*. (Masturbation and the nervous system of the child.) *Monatssch. f. Kinderhk.*, 1931, 51, 359-

369.—Study of 75 cases of masturbation in young school children showed normal distribution with respect to intelligence and incidence of nervous disturbances. The primary causative factor appeared to be the general atmosphere of the home. In most instances the love relations within the family were disturbed or abnormal. In the discussion following the formal paper are three photographs by Pfungst of thumb-sucking in three different species of monkeys, two of the animals being new-born and one an adult.—*K. C. Pratt* (Michigan Central State Teachers College).

4050. Bühler, C. The child and its activity with practical material. *Brit. J. Educ. Psychol.*, 1933, 3, 27-41.—The pre-school child uses objects unspecifically in his make-believe play until about 4 years of age. From then until he reaches school age the child begins to treat objects specifically and learns to derive pleasure from making something out of the objects rather than from merely manipulating them. After he has reached school age the child is mainly concerned with two problems: What can one use? What can one make out of it? This accounts for the surprisingly large percentages of collectors among children between the ages of 6 and 13. Their interests are predominantly practical and they should be encouraged in this because it appears to be an important factor in mental development. Furthermore, it appeared from interviews with adolescents that such persistence in one type of work produced a feeling of mastery and self-confidence lacking in those who had not persisted in any one type.—*H. Beaumont* (Kentucky).

4051. Chmelář, V. Die einfache und zusammengesetzte senso-motorische Reaktionszeit bei normalen und abnormalen Kindern. (The simple and combined sensorimotor reaction time in normal and abnormal children.) *4 Versamml. f. Kinderforsch.*, Bratislava, 1932, 412-432.—The reaction time of 9 normal children, 11-14 years old, and of 17 sick children (encephalitis, Little's disease, infantile paralysis, rachitis, and bone tuberculosis) was tested by the method of hand movements following an optic signal (the lighting up of colors). The healthy children showed in the disjunctive reaction a decrease of reaction time with increasing age. The sick children (with the exception of the poliomyelitis cases) showed with both simple and complicated reactions an increase of reaction time, even after long practice. The bearing of these results on educational policy is that these physically abnormal children need a longer time to form habits and that as far as possible they should be kept out of vocations which make great demands on the psychomotor apparatus.—*M. E. Morse* (Catonsville, Md.).

4052. Fischer, M. Prophylaxe und Hygiene im Schulalter. (Prophylaxis and hygiene in the school age.) *Zsch. f. psych. Hygiene*, 1933, 6, 1-8.—Because of the decline in the birth rate, much effort has been expended to improve the hygiene of the young child and much attention has been given to the care of the mother before the birth of the child.

For this reason the average height and weight of the six to fourteen year old school child are greater than those of forty years ago. Very little is being done for the school child, and this is the fault of those who are dealing with him—the teachers and hygienists. There are many factors, such as the construction of the school room and the demands of industry, which are responsible for this. The school condition often results in nervous as well as physical disorders. To correct this, children should be permitted plenty of outdoor exercise and physical training. They should go "back to Mother Nature" and should be taught hygiene as well as leading a natural, individual, free life. It is the duty of all those connected with children to do as much as possible to correct the situation.—*L. S. Selling* (Institute for Juvenile Research, Chicago).

4053. Friedjung, J. K. Die Physiologie und Pathologie der kindlichen Sexualität. (The physiology and pathology of sexuality in the child.) *Monatssch. f. Kinderhk.*, 1931, 51, 343-358.—Following the general Freudian formula that the neonate is a pleasure-pain organism tending to repeat and prolong pleasant experiences, the author reviews the course of sexuality from an initially rather diffuse state with major areas of sensitivity about the mouth, nose, ears and genitalia to the relative limitation to the latter in the case of the normal adult. Given such sensitive areas self-stimulation is a natural consequence. The author points out that masturbation exists in domestic and wild animals. An act is to be considered pathological or abnormal when it shows a marked deviation from the norm for the particular age or from the norm for the particular cultural group. 12 typical cases are reviewed and general preventive and prophylactic measures are outlined.—*K. C. Pratt* (Michigan Central State Teachers College).

4054. Gött, T. Physiologie und Pathologie der Sexualität. (Physiology and pathology of sexuality.) *Monatssch. f. Kinderhk.*, 1931, 51, 321-342.—The basis of sexuality is the sex instinct, which depends primarily upon the maturation of the sex organs. The "sexual stimulus-threshold" is therefore high in the normal child and decreases with the approach of puberty. The author distinguishes between the sensations arising from stimulation of the genitalia and the psychic processes arising from a sexually exciting situation. In the adult these are integrated whereas in the child the two conditions may exist independently. Pleasure may be derived through stimulation of other areas of the body, particularly those subserving the food instinct, but it has not been demonstrated that this has a sexual connotation. Masturbation cannot be considered normal merely because of widespread occurrence. By this logic dental caries would also be normal. Masturbation is abnormal in that it is a deviation from the normal development of the sex instinct. With Zappert the author holds that the normal sex act is a conditioned reflex, while self-stimulation releases an unconditioned reflex.—*K. C. Pratt* (Michigan Central State Teachers College).



4055. Hagman, E. P. The companionships of preschool children. *Univ. Iowa Stud.: Stud. Child Welfare*, 1933, 7, No. 4. Pp. 69.—A preschool group of fifteen two-year-old children and another group of twenty four-year-olds were observed for companionship reactions during free play on alternate mornings for eleven weeks. Detailed criteria of companionship reactions were worked out. Indexes of the frequency of companionship between each child and every other child in his group were computed. These indexes were then correlated with the subjects' differences in various characteristics. Average percentages of agreement of 83.0 to 86.9 between simultaneous observers and raw correlations of  $.877 \pm .010$  and  $.761 \pm .012$  were obtained between the results of alternate observations around the group. These correlations became .934 and .864 when corrected by the Spearman-Brown formula. The correlations of mutual companionship, obtained by comparing each child's companionship indexes to others with their corresponding ones to him, were  $.921 \pm .007$  and  $.893 \pm .006$ . Correlations on all possible pairs in the groups revealed little or no relation (correlations varying from .095 to .318) between frequency of companionship and similarity in chronological age, mental age, intelligence quotient, height, weight, extroversion, social stimulus index and two social reaction indexes. The social stimulus index for a given child was an indication of how much other children in the group reacted to him; his social reaction indexes were measures of how he reacted to them. When individual children's measures in each of the nine characteristics were correlated with those of their most frequent companions, higher correlations were obtained than in the results for all pairs. There were great differences among individuals in the amount and direction of trends of their correlations. These differences accounted for some of the lowness of the correlations for all pairs and for most frequent pairs. There was no relation between frequency of companionship and mere opportunity to associate, as measured by the number of days present together during the year, or between frequency of companionship and previous school association. On the other hand, association outside of school was definitely related to frequency of companionship. The most noticeable age difference found was that the four-year-olds showed a decided preference for companions of their own sex, whereas the two-year-olds indicated no such preference. Some children reacted to no other child in the group more than 4 or 5% of the total opportunities they had for companionship. Others reacted to one individual more than 40% of the occasions presenting such an opportunity. Two experimental situations were set up, but did not prove to be particularly good indexes of the group observations.—B. Wellman (Iowa).

4056. Hagman, R. R. A study of fears of children of preschool age. *J. Exper. Educ.*, 1932, 1, 110-130.—This study aims to investigate the occurrence of fears in a group of children in their natural environments. The 70 children used included 30 girls and 40 boys ranging in age from 1 year, 11 months, to 6 years. Data were obtained by holding interviews with the

children's mothers and by subjecting some of the children to an experimental situation. The experimental situation was used to obtain a description of the children's overt behavior in a possible fear situation. A phonograph recording of artificial thunder was reproduced with amplification as a possible fear stimulus. Motion pictures recorded the overt behavior of the subjects. Some of the chief results obtained from the interview data were as follows: (1) The average number of fears reported for the group was 2.7. The feared objects occurring most commonly are listed in the order of frequency: (a) dogs, (b) doctors, (c) storms, (d) deep water, and (e) darkness. (2) There are significant differences between the mean ages of occurrence of some fears. (3) Seven categories of overt behavior in original situations rank consecutively in order of frequency as follows: (a) withdrawal, (b) facial alarm, (c) crying, (d) clutching, (e) trembling, (f) paralysis, (g) startle. (4) There is a real tendency for a child to have fears corresponding to those of his mother. (5) Explanation and no treatment at all rank first and second respectively, as methods used by mothers to eliminate children's fears. The following conclusions were drawn from the experimental situation: (1) Presentation of an artificial thunder stimulus produced a reduction in the movement of the hands and arms, feet and legs, head and torso. (2) There was a tendency at the moment of stimulation to look at the usher who brought them into the situation. (3) An apparent discrepancy in comparing the experimental situation data with the interview data reveals a weakness in the experimental situation because of its failure to reproduce a natural fear situation.—H. W. Karn (Clark).

4057. Hattendorf, K. W. A home program for mothers in sex education. [In] *Researches in Parent Education I. Univ. Iowa Stud.: Stud. Child Welfare*, 1932, 6, Part I, 11-92; 211-288.—Mothers who had children under junior high school age and who were desirous of giving these children sex education were selected to participate in a home program for mothers in sex education. The program consisted of a first home interview, an introductory sex education conference course followed by a second individual contact, and monthly discussion group meetings. 113 mothers with 227 children participated. Difficulties in attempting sex education of children as presented by the mothers are discussed. 749 incidents recorded by the mothers were analyzed. The analysis presents the number, age and sex of children for whom incidents were recorded, together with the time of occurrence of each incident, the initiator, the amount of individual instruction, and the subject material. A marked interest in sex was displayed by the children between five and nine years of age. Incidents were recorded for a greater number of girls than boys, and girls initiated a greater number of incidents, but more incidents were recorded per boy than per girl. More questions concerning sex occurred per boy than per girl although a larger proportion of the girls asked questions. The earliest interest was displayed in the organs of the body and their functioning and in phys-

ical sex differences. This was followed by interest in the origin of babies, the coming of a new baby and the process of reproduction. Books and pamphlets selected as most helpful to them by the greatest number of mothers indicate a marked indorsement of the required reading material in the early sex education reading course list supplied to them. Parents put into practice to a marked degree the method outlined by the program. An appendix of 77 pages gives detailed incidents offering opportunity for sex education.—*B. Wellman* (Iowa).

4058. Helmreich, E. *Physiologie des Kindesalters*. Tl. 1 and 2. (Physiology of childhood. Parts 1 and 2.) *Monog. a. d. Gesamtgeb. d. Physiol. d. Pflanzen u. d. Tiere*, 1931-33, Bd. 24 and 28. Berlin: Springer.—*W. S. Hunter* (Clark).

4059. Herrmann, M. *Beobachtungen über den Einfluss der Nahrungstemperatur auf das Verhalten des Säuglings*. (Observations of the effect of food temperature upon the behavior of the suckling.) *Monatssch. f. Kinderh.*, 1931, 51, 49-69.—The author found great variation in the nursing behavior of infants fed artificial food substances at temperatures above and below 37° C., the temperature of mother's milk. No relation between the temperature of the food and the behavior of the infant could be established, but digestive disturbances showed higher incidence following feeding at temperatures of 20°-30° C. Hence care should be taken that the food temperature never falls below 30° C.—*K. C. Pratt* (Michigan Central State Teachers College).

4060. Irwin, O. C. The relation of body motility in young infants to some physical traits. *J. Exper. Educ.*, 1932, 1, 140-143.—The motility of 73 infants under 16 days of age was determined by the stabili-meter-polygraph method. Eighteen physical traits of 66 of these infants were measured either directly or determined by the use of various formulae. Treatment of the data to determine whether these physical factors bear any independent relation to infant body motility resulted in low correlations. Body surface gave the best correlation with motility, but this was only .20 ± .08. Intestinal area, which is of particular interest because it has been shown to bear a constant relationship to the total daily amount of food intake, shows no correlation with body motility.—*H. W. Karn* (Clark).

4061. Jack, L. M. A device for the measurement of parent attitudes and practices. [In] *Researches in Parent Education I. Univ. Iowa Stud.: Stud. Child Welfare*, 1932, 6, Part IV, 137-149.—An interview was formulated for obtaining information on mothers' practices in child rearing and the behavior of their children. The subjects were 28 mothers of children two to ten years of age who were enrolled in parent education classes conducted by local women who had taken a course of training at the State University of Iowa given by members of the parent education staff. The subjects were interviewed before and after the course. The differences in attitudes and practices as a whole brought about during a four months period of training, were not great enough to be considered

reliable, although there was improvement. Greatest improvement was shown in the sections on play and discipline. The mothers who were presumably without the more elementary knowledge of correct practice made decided improvement in practice; those who were superior in the beginning improved little.—*B. Wellman* (Iowa).

4062. James, H. W. Honesty as a character trait among young people. *J. Educ. Res.*, 1933, 26, 572-578.—Honesty was analyzed among 102 (female) students at Alabama College. The factors considered were bluffing, lying, cheating among high-school students, and those shown by their choice of a future husband's vocation. Experimental and questionnaire methods were employed. From an analysis of the results the author concludes that "Pretending to know the right answer is rather generally practiced by college students; cheating in some form is practiced by most high-school students; it is a common practice for the majority of college women to lie to each other, to their parents and to their instructors."—*S. W. Fernberger* (Pennsylvania).

4063. Jenkins, R. L. Periodicals for child guidance clinics. *Ment. Hygiene*, 1932, 16, No. 4.—*R. R. Willoughby* (Clark).

4064. Jensen, M. B. Mental traits of the children of oil industry workers. *J. Appl. Psychol.*, 1932, 16, 633-643.—Children of the workers in one of Michigan's oil fields give no indication of inferiority in physique, mental ability, accomplishment, or character, nor is there any evidence that they are discriminated against in any particular in the public schools they attend. They are freer from physical defects than are the local children. They are rated by their teachers as superior to the local children in study habits, leadership, and adjustment to the social group. They are markedly accelerated in grade placement over the local children on the bases of both life age and informational background. Marked sex differences in teachers' ratings which are found are thought to be due to differences on the part of the teachers rather than to character differences between the sexes. No superiority of accomplishment on the part of the girls was found.—*E. H. Kemp* (Clark).

4065. Kamaryt, S. *Die frühesten Erinnerungen der Septimaner*. (The earliest memories of seventh-grade pupils.) *4 Versamml. f. Kinderforsch.*, Bratislava, 1932, 256-262.—The seventh-grade pupils of a technical school were asked to write out, for the following day, their earliest memories. They were expressly warned not to confuse these with the tales of adults. In almost 80% of the 149 answers, this recollection was accompanied by a strong emotional tone, which in more than 50% of the latter cases was unpleasant (fear, shame, anger, etc.). A correlation appears to exist between unpleasant tone and the possibility of recollection. These results speak against the Freudian theory of covering memories.—*M. E. Morse* (Catonsville, Md.).

4066. Lukács-Szász, I. *Mennyiség*. (Quantity.) *Magyar Gyógypedagógia*, 1932, 20, 37-47.—Continuing the evolution of a little child from the beginning



of life to 17 months. (See VI: 1588 for Chapters I-III.) IV. Transition out of the event (occurrence) of temporal versus that of spatial reiteration. From 5 to 11 months: First appearance of spatial elements. V. The spatial defect. From 8 months. VI. Words for characterization of defects (*carried away, gone away, nothing, there is not*). VII. Spatial reiteration (likeness). VIII. Quantity-like relations in the occurrence (event) of defect. IX. Quantity-like relations in temporal reiteration beginning with 8 months (*other, forward, enough, more*). X. Quantity-like relation in spatial reiteration from the age of 14 months (*also, other*). XI. Quantity (from 14 to 17 months). (1) Plurality. Repetition of words. Use of plural (*several, much, also the other one*). (2) Two, from 15 months. (3) Gathering up of different objects in one quantity. Bringing of different objects into common relation. (4) Three, how much? Making two of three. The third.—P. Ranschburg (Budapest.)

4067. Manuel, H. T., & Hughes, L. S. The intelligence and drawing ability of young Mexican children. *J. Appl. Psychol.*, 1932, 16, 382-387.—Drawings of the children used as subjects were studied from the standpoint of intelligence exhibited as well as ability in drawing. In general the average ability of the Mexican children both in intelligence and in drawing compares favorably, grade for grade, with that of other children. A comparison by ages, however, is less favorable. At each age level (7-10) the Mexican children have lower scores both in drawing and in intelligence. In intelligence the difference is equivalent to about a year of mental age.—E. H. Kemp (Clark).

4068. Marzell, M. A gyermek- és serdülőkori lelki képe. (Psychical view of childhood and puberty.) Budapest: 1932. Pp. 280.—The real life. Beginning of personal connections with life. I. Life in awaking. II. Life in evolution. III. The period of transition: (1) boys, (a) school-boys, (b) apprentices, (c) village boys, (2) girls, (a) school-girls, (b) apprentices, (c) village girls. Educational institutions. (a) boys; (b) girls. IV. Psychical description of puberty. Bodily transformation and psychological evolution of (1) girls and (2) boys during puberty. V. End. Personality as a center of energies. VI. Index.—P. Ranschburg (Budapest).

4069. Moragues, J. Estudi dels anormals. (The study of abnormal children.) *Rev. de psicol. i ped.*, 1933, 1, 77-85.—This is a brief résumé of part of a lecture course given at the Institut Psicotècnic of the "Generalitat" of Catalonia in 1932-33. An abnormal child is defined, with intentional vagueness, as one whose capacity for learning and adaptation to the environment is made difficult by internal or external causes which in one way or another make him inferior to other children. Abnormal children are classified as provisional or permanent. The difficulties in the first group lie in the family situation, the school, or the child's physical condition (malnutrition, deformities, defects of the special senses, etc.). By permanent abnormality is meant any condition which forms an integral part of the individual's phenotype. Moragues

discusses briefly the idiot, imbecile, moron, and epileptic. In the psychological study of mental defectives, he recommends for those below two years Kuhlmann's and Izard's tests combined with Bühler's scheme of the development of language; after three years, the Terman scale, or better, the Yerkes, and the DeSanctis tests. The psychographic profile of Vermeulen is essential for more exact diagnosis in the lighter grades of mental deficiency, and in addition it gives the prognosis and indications for treatment.—M. E. Morse (Catonsville, Md.).

4070. Nemzek, C. L., Cronin, M., & Brannom, E. Motor ability of high-school girls. *J. Educ. Res.*, 1933, 26, 593-594.—The Brace Scale of Motor Ability Tests and the Pressey Senior Classification Test were administered to 333 girls in two vocational high schools of Minneapolis. Correlations are made between the results of the two tests and with age, height and weight. The correlations are all low and the authors conclude that "measures of intelligence, age, height and weight are of little practical value for predicting the motor abilities measured by the Brace Tests."—S. W. Fernberger (Pennsylvania).

4071. Neustadt-Steinfeld, E. Sorgenkinder. (Children needing special care.) *Gesundheit u. Erziehung*, 1932, 45, 247-255.—The author discusses the essential features of the physical and mental disturbances of the different periods of childhood and outlines the methods of treatment. The work is written for the educated laity and follows the standards of modern psychiatry and psychopathology.—M. E. Morse (Catonsville, Md.).

4072. Norsworthy, N., & Whitley, M. T. The psychology of childhood. New York: Macmillan, 1933. Pp. xvii + 515. \$1.80.—This revised edition contains new material on language and reading, mental hygiene, character training, children's thinking, constructive activities, sex development, and boys' gangs. Intended for use as a textbook in teachers' training classes, it selects such facts of heredity, child constitution, and development as will present a descriptive picture of childhood and be of service to teachers dealing with children. Each chapter contains exercises for field work and investigation, and reading references. "Two cross sections of child life" picture typical children aged 5 and 11. There is an extensive bibliography.—M. P. Montgomery (Faribault, Minn.).

4073. Ochsenius, K. Zur Frage der Sexualität im Kindesalter. Eine unwissenschaftliche epikritische Betrachtung. (The question of sexuality in childhood. An unscientific epicritical view.) *Monatssch. f. Kinderh.*, 1931, 51, 292-298.—The author believes that precocious sexuality, as indicated by masturbation or abnormal interest in sex organs, is determined in large part by specific acts of older individuals.—K. C. Pratt (Michigan Central State Teachers College).

4074. Ojemann, R. H. A standard for estimating the validity of child development principles. [In] *Researches in Parent Education I. Univ. Iowa Stud. Child Welfare*, 1932, 6, Part II, 95-114.—A

method of developing a standard for estimating the validity of child development principles as part of a program of research in parent education is described, and illustrated by materials in the field of training in eating activities. There are two major problems in the development of such a standard. First, what shall be the source of the principles for those phases of child development for which tested results are not available? Second, how shall it be determined into what divisions of a given field the principles are to be classified? The validity of a principle depends upon the refinement of the method by which the basic data have been derived. The curriculum maker has the responsibility of setting up the necessary machinery so that principles which are being taught can be revised to keep pace with the advance of research. In the development of the standard a bibliography is made of research studies in the field being considered. The conclusions of these studies are supplemented by the semi-refined observations which are the best available data for those phases of the field not represented by research. The procedure for arriving at the subdivisions of the field is described, and a detailed illustration is given of how these procedures are applied in the psychology of eating.—*B. Wellman* (Iowa).

4075. Orgel, S. Z., Goldman, J., & Blanchard, M. B. An approach to a difficult child care problem. *Ment. Hygiene*, 1932, 16, No. 3.—*R. R. Willoughby* (Clark).

4076. Ralil, A. Die kriminologische Erforschung des Kindes und des jugendlichen Verbrechers. (The criminological study of the child and the juvenile delinquent.) 4 *Versamml. f. Kinderforsch.*, Bratislava, 1932, 50-56.—The criminological study of the child falls into three parts: phenomenology; etiology; and the reaction of society in the form of repressive and preventive measures. The biological factors were over-emphasized by Lombroso. At the present time, the environment is given its true value as the determining factor in delinquency. At the same time, physio-psychological methods are being increasingly replaced by experiment.—*M. E. Morse* (Catonsville, Md.).

4077. Richmond, W. V. The adolescent boy. New York: Farrar & Rinehart, 1933. Pp. cvi + 233.—A survey of the anthropological and historical background shows that the social significance of adolescence has always been stressed, and that education and training have been directed toward securing conformity of the new generation to the ways of the old. The primitive view that puberty marks an abrupt change has been abandoned. No new traits are created, but trends already existent may come to light. The period is marked by nervous instability. Its most persistent problems arise from development of the reproductive system. Two facts of greater importance to the boy than any other factors, concerning which he is yet often left uninformed, are the normality of disturbing emotions accompanying erections, and of nocturnal emissions. In order to understand normal adolescents it is necessary to con-

sider deficiencies and abnormalities—mental defects and special disabilities, personality defects, depression hysteria, schizophrenia, paranoia, epilepsy, and psychopathic personality. The author believes that there are two types of dementia praecox appearing during adolescence, the first the "classical" or psychogenic type which results from wrong handling of a nervous child; the second the constitutional type, marked by self-centered childhood and increasing difficulty in social adjustment, which can no more be normalized than can feeble-mindedness. The study of delinquency is necessary both because this is the period of life when the majority of crimes are committed, and because criminal careers are begun during youth. There is no acceptable proof that heredity plays any significant part in the production of delinquency. A knowledge of personality types is often an aid in understanding a child, but the writer does not believe that any scales yet devised are of use in determining an individual's type. Problems the boy must solve are the questions of masturbation, homosexuality, prostitution, petting, venereal disease, and alcohol. Besides these sex problems there is the necessity for vocational choice. The boy of average intelligence often suffers because too much is expected of him. It is a question whether he should be prepared for college, since it offers little to appeal to him. The tendency of modern educational institutions is to reflect the mechanization and standardization of modern life. Modern extroverted religion is not calculated to satisfy emotional needs.—*M. P. Montgomery* (Faribault, Minn.).

4078. Robin, G. Essai d'interprétation neurologique d'une forme d'inattention idiopathique chez l'enfant. (Attempt at a neurological interpretation of a form of idiopathic inattention in the child.) *Enceph.*, 1932, 27, No. 8.—The author states that there are inattentive children whose difficulty does not reveal a psychomotor syndrome of instability or a morbid constitution. These are children who are inattentive in spite of themselves; habitually inattentive in spite of good will, an evident mental effort, and good intelligence. They are not scatter-brained, distracted, or dreamers, but they remain unproductive. Aside from short phases when the attention is voluntary, that is, forced, it is an idiopathic inattention for which the author gives a motor interpretation which describes these intelligent children as ill and not deficient.—*Math. H. Piéron* (Sorbonne).

4079. Robin, G. Le praticien et la neuropsychiatrie infantile. Les arriérés, la débilité intellectuelle distinguée du retard mental. (The practitioner and child neuropsychiatry. The retarded: intellectual weakness as distinguished from mental retardation.) *Concours méd.*, 1932, 54, 2923-2925.—The author thinks that the term mental weakness, which as used by Binet and Simon includes all states between imbecility and normal intelligence, is too expansive, and that it would be an advance to substitute the term mental retardation. Mental weakness must be distinguished from intellectual retardation, because it seems to demand, in order to be such, a character disturbance.—*Math. H. Piéron* (Sorbonne).



4080. Robin, G. *Les troubles du langage chez l'enfant*. (Language difficulties in the child.) *Concours méd.*, 1932, 54, 844-848.—Aside from disorders inherent in a nervous disease which is in progress, there are some which depend upon intellectual deficiency. In mental affections language generally develops parallel to thought. It is moreover more rudimentary as the thought is more reduced. In still other cases the deficiency is selective in the sense that intelligence can be attained only as a function of language, and, finally, in some cases the language difficulties are a function of psychic inhibition, in which emotivity is often followed by the inferiority complexes described by Adler.—*Math. H. Piéron* (Sorbonne).

4081. Rose, M. S., & Gray, C. E. *The relation of diet to health and growth of children in institutions*. *Child Development Monog.*, 1932, No. 2. Pp. vii + 128.—This study was made to determine the adequacy of diet of children in institutions by comparison with model dietaries and by checking growth of the children with accepted standards of height, weight and development. Four institutions were studied, including children from 5 to 16 years. The food was classified in six groups: cereals, milk, vegetables, fats, sugars, meat and eggs. In three of the institutions the amount of fat was found to be too low; in two fruit and vegetables were lacking; in one total energy value was deficient; two showed shortage of iron; and one offered an excellent minimum cost diet. These results are all presented in tabular form. The menus studied are given and analyzed, and a model 3-weeks dietary at minimum and at moderate cost is offered.—*M. P. Montgomery* (Faribault, Minn.).

4082. Rostohar, M. *Probleme und Methoden der psychologischen Erforschung des Kindes*. (Problems and methods in the psychological study of the child.) *4 Versamml. f. Kinderforsch.*, Bratislava, 1932, 32-50.—Introspective methods, suitable for adults, must be replaced in child psychology by a retrospective method, i.e., remembrances of one's own childhood and the evaluation of the recollections of other persons. Other approaches include observation, the use of diaries, and experiment. Rostohar describes the various forms of expressive methods and accomplishment experiments. His own studies showed that through Rahlmann's training method the baby learns to recognize its bottle by the shape. As to children's drawings, the author has demonstrated that the child reproduces neither what he perceives nor, as Katz believes, what he knows about the object, but only the idea which he can reproduce in the flat. Hence free-hand drawing and copying from a model are originally equivalent; only later is three-dimensional space expressed in drawings from an object. Further studies attacked the problem as to how the reproduction evolves from the visual presentation. Comparison of drawings obtained from views of an object at repeated intervals showed that the representations became fuller after each view. This development was either cumulative, i.e. the heaping up of single characteristics, or the representation had from the begin-

ning a fundamental structure, which in the case of the younger children followed a guiding motive, and in the older and more talented children, followed the outline. These results demonstrate that representation and idea are different. After a certain time, the representations disintegrate and earlier phases of development reappear, although the ideas are retained.—*M. E. Morse* (Catonsville, Md.).

4083. Rostohar, M. *Wie entwickelt sich bei Kindern der konkrete Gegenstandsbegriff?* (How does the idea of concrete objects develop in children?) *4 Versamml. f. Kinderforsch.*, Bratislava, 1932, 262-265.—The author studied the problem whether, in spite of slight changes, children could make an identification of different colored wagons in a "mattador play." The youngest children used the local factor, i.e. the place where the object was found, as the sign of identification. At later ages, the color and eventually the form of the object were utilized. Rostohar draws the conclusion that conscious identification is facilitated by an increase in the determining signs.—*M. E. Morse* (Catonsville, Md.).

4084. Rowe, E. C. *The biological and social background of a tantrum case*. *Ment. Hygiene*, 1932, 16, No. 4.—*R. R. Willoughby* (Clark).

4085. Russell, D. W. B. *Children: why do we have them?* New York: Harper, 1933. Pp. 287. \$2.50.—*R. R. Willoughby* (Clark).

4086. Schaus, H. S. *An experimental investigation of methods in parent education*. [In] *Researches in Parent Education I*. *Univ. Iowa Stud.: Stud. Child Welfare*, 1932, 6, Part III, 117-134.—The results of teaching the same parent education subject material to two groups by different methods, lecture and study discussion, were determined. Members of study groups were equated on education, information in parent education subject material, present practices in parent and child behavior, number of children, and occupational status. The lecture group had 28 members, the study discussion group 27 members. Comparison of the two methods of teaching was made on mastery of subject material in parent education, changes in parent and child behavior, members' attendance at meetings, and the use made of equally accessible libraries. The study discussion group made slightly more advance in the acquisition of subject matter than the lecture group. A difference approaching significance in favor of the discussion group was found in the use made of library books. Other differences were so small as to be within the limits of chance.—*B. Wellman* (Iowa).

4087. Schweinitz, K. de. *The dangers and advantages of sex instruction for children*. *Ment. Hygiene*, 1931, 15, No. 3.—*R. R. Willoughby* (Clark).

4088. Shirley, M. *The first two years*. Vol. II. *Intellectual development*. Minneapolis: Univ. Minnesota Press, 1933. Pp. xvi + 513. \$3.00.—The author continues the analysis of the extensive data collected by her, with the assistance of Dr. Edith Boyd, on about 20 babies from birth till the second birthday. Part I, *Development of Specific Behavior*

*Traits*, contains an introductory chapter and chapters on fine coordination, motor sequence, speech, social behavior, and generalization. Part II, *The Psychological Examinations*, contains nine chapters devoted to the analysis of and detection of genetic sequences in a large number of motor and psychomotor tests, principally elaborated by the investigators out of materials and methods encountered by them in the home situation or in connection with other routine tests (as reaching for swinging tape or calipers, or recognizing mother's picture). Part III, *Consistency in Rate of Development*, comprises a chapter on developmental scores (including consistency measures), one on point scores, and a terminal interpretive chapter on the inferred principles of behavior development. Appendices give the schedules used, and a bibliography of 67 items and an index are included.—R. R. Willoughby (Clark).

4089. Stogdill, R. M. Parental attitudes and mental health standards. *Ment. Hygiene*, 1931, 15, No. 4.—R. R. Willoughby (Clark).

4090. Vodnaffk, O. Das religiöse Leben unserer Kinder. (The religious life of our children.) 4 *Versamml. f. Kinderforsch.*, Bratislava, 1932, 366-375.—The boys in a suburban public school were asked to give written answers to questions concerning their religious experiences and opinions. The results of this study were filled out by means of questionnaires and personal observations. This age of 11-16 years stands under the conflicting influences of religious authority and growing critical capacity. For many of these children, religion was merely an empty affair. In a class of 32 pupils, 20 were completely indifferent to religion, 6 had a positive attitude, and 6 were critical and doubtful.—M. E. Morse (Catonsville, Md.).

4091. Vydra, J. Stammesunterschiede in der Begabung des Kindes für bildende Kunst. (Racial differences in children's talent for pictorial art.) 4 *Versamml. f. Kinderforsch.*, Bratislava, 1932, 311-314.—120 pupils of elementary schools in Slovakia were given the task of drawing a rose, a house and a gypsy. The Slovak children showed great aptitude, which expressed itself in a strong tendency to rhythm. The Hungarian pupils were less gifted rhythmically, and the Germans the least so. The Jews and gypsies also displayed little ability. A similar scale was apparent in the coloring of the drawings. Vydra believes that he has found a difference also in the attitude of children living on the mountains and those on the plains, in that the former showed a tendency to rhythm, the latter to stylization.—M. E. Morse (Catonsville, Md.).

4092. Wagoner, L. C. The development of learning in young children. New York: McGraw-Hill, 1933. Pp. xiv + 322. \$2.50.—That the prevention and cure of undesirable traits lie in the opportunity of learning is the thesis of this dynamic view of child development. An introductory description of animal learning shows its similarity to child learning. A series of items is compiled from responses of individual children to indicate what may be expected of normal

children at different ages, beginning at 2 months. "If teaching could wait upon adequate maturation, time, effort, and vexation would be saved, while skill and success would be increased." The process of socialization must also be gradual. "It may be that in reality this contrast of individualization and socialization is spurious, that the little child in his relations to other people should not be measured by adult criteria." In emotional training it is desirable to preserve strength and variety of emotional response. "Mastery of the emotions may come through raising the threshold for undesirable stimuli and lowering that for desirable ones." The processes of learning to talk, to eat, to play, to sleep, to control the body and the emotions, are illustrated by nursery school situations. "Successful training of children is achieved when the source of authority is perceived to be in the situation rather than an outgrowth of personal relationships."—M. P. Montgomery (Faribault, Minn.).

4093. Wexberg, E. Über Verwahrlosung im bürgerlichen Milieu. (On neglect in middle-class environments.) *Vjsch. f. Jugendk.*, 1933, 3, 47-67.—Neglect is often considered one of the chief causes of child problems, but from the point of view of individual psychology neglect may occur in what appear to be optimum social situations. Two cases of children of well-to-do parents are described in full, where indifference of the mother and weakness of the father led to a feeling of isolation, distrust and antisocial conduct.—M. Lee (Chicago).

4094. Witty, P. A., & Lehman, H. C. The collecting interests of town children and country children. *J. Educ. Psychol.*, 1933, 24, 170-184.—It is found by means of a check-list of 190 items, presented to large populations of town and country children, that the rural child collects many more objects than does the city child. The relative frequencies with which the items listed are collected are shown. The relation between these data and those of prior studies are discussed.—J. A. McGeoch (Missouri).

[See also abstracts 3677, 3787, 3872, 3907, 3994, 4007, 4113, 4114, 4116, 4143, 4177, 4188, 4204, 4211.]

#### EDUCATIONAL PSYCHOLOGY

4095. [Anon.] Manual of directions, New York survey tests in arithmetic. New York: Board of Education, Bureau of Reference, Research and Statistics, 1932. Publication No. 25.—L. A. Averill (Worcester Teachers College).

4096. [Anon.] New York spelling tests, series PW. New York: Board of Education, Bureau of Reference, Research and Statistics, 1932. Publication No. 26.—Two tests of 50 words each, based on the lists of prescribed words in the New York City course of study in spelling, grades 4b to 8b. The test words were spelled correctly by from 70 to 80% of the pupils in the grades for which the words have been listed. The two lists are approximately equal in difficulty.—L. A. Averill (Worcester Teachers College).

4097. Arnspiger, V. C. Measuring the effectiveness of sound pictures as teaching aids. *Teach. Coll.*



*Contrib. Educ.*, 1933, No. 565. Pp. vii + 156.—Four detailed units of instruction in natural science were taught to 950 (32 classes) fifth-grade pupils who had been divided into an experimental and control group on the basis of home environment and intelligence. 150 minutes of instruction was devoted to each unit. The teachers for the two groups were equated (Jacobs Teacher Efficiency Rating Scale). In the experimental group there were 3 showings, during the allotted time, of a 10-minute sound picture on the unit (120 minutes of instruction plus 30 minutes of pictures). The control teachers utilized any teaching methods with which they were familiar. They did not see the sound pictures. Objective tests, not seen by any of the teachers, were given 2 weeks before, immediately after, and 4 weeks after the unit was taught. The same procedure was used for 1425 pupils in the seventh grade for four units in music. 5 cities in 3 states participated in the experiment. In spite of an initial slight superiority of the controls on the subject matter tests, the final tests showed that the experimental group was superior. Both the intellectually superior and the inferior pupils profited by the pictures. "... the talking pictures used in this experiment made marked and lasting contributions to learning. . . [in both units] . . . These contributions . . . were made without the loss of learning other elements of subject matter of the units not included in the talking pictures themselves." An analysis is made of the effectiveness of specific elements of the picture composition of the films used. 60 pages of appendices give a typical unit of instruction, a typical sound picture continuity (picture elements and sound accompaniments), a typical initial subject matter test, and tables giving the complete data. A bibliography lists 10 titles.—*J. M. Stalnaker* (Chicago).

4098. Baker, F., & Broom, M. E. Concerning one criterion for the choice of primary reading tests. *J. Appl. Psychol.*, 1932, 16, 419-420.—Data yielded by six standardized silent reading tests were used in a determination of the validity of these tests by the intercorrelation technique. The tests were: the Los Angeles Primary Word Recognition Test, Form 1; the Detroit Reading Test, Test 1, Form A; the DeVault Primary Reading Test, Form 1; the Los Angeles Primary Reading Test, Form 1; the Williams Primary Reading Test, Form A; and the New Stanford Achievement Test, Primary Examination, Reading Section, Form V. About 90 students took each test. The tests validate each other very well, as the coefficients of validity range from .57 to .84.—*E. H. Kemp* (Clark).

4099. Beck, R. L. A natural test of English usage. *J. Exper. Educ.*, 1933, 1, 280-286.—Since free composition is impractical as a means for measuring language ability, and proof-reading and multiple-choice forms of tests do not yield measures of language ability, some other type of language performance is needed. The sentence completion exercise offers a means for controlling compositions. The words needed in completing sentences are supplied by the

student, and probably their form represents his natural or habitual English usage. With these facts in mind the author proceeded to construct a test of English composition which uses the sentence completion exercise. A description of the test together with the methods used in determining its validity and reliability are given in the report.—*H. W. Karn* (Clark).

4100. Benson, D. C., Lough, J. E., Skinner, R. S., & West, P. V. *Psychology for teachers*. (Rev. ed.) Boston: Ginn, 1933. Pp. xi + 490.—This is a rather complete reorganization of the earlier edition. The new book is divided into four parts: (1) the bases of behavior; (2) learning and adjustment; (3) measurement of behavior; and (4) personality and adjustment. The general treatment and organization of topics in the new edition is much freer from the influence of the traditional subject-matter of general psychology than the old. Only one chapter on the nervous system is included in the new edition, as opposed to two in the old. The chapter on the effect of fatigue and drugs on mental efficiency has been eliminated. New chapters on the following topics have been added: nature and nurture, growth and development, dynamics of behavior, educational measurements, guidance, psychology of character, personality development and integration, and psychology in school relationships.—*V. Jones* (Clark).

4101. Briggs, T. H., & Armacost, G. H. Results of an oral true-false test. *J. Educ. Res.*, 1933, 26, 595-596.—The authors find that the oral true-false test as a measure of immediate recall compares very favorably with such a test presented in visual form.—*S. W. Fernberger* (Pennsylvania).

4102. Cammarata, A. *Pedagogia di Mussolini. La scuola dell'Opera Nazionale Balilla. I corsi per i capo-centuria e i Campi Dux*. (The pedagogy of Mussolini. The Opera Nazionale Balilla school. Courses for the chief centurions and the field leaders.) Palermo: Trimarchi, 1932. Pp. 196.—Mussolini has initiated a new epoch in Italian education: his pedagogy makes no distinction between the physical life and the spirit or between the citizen and the nation, and he wishes to form the Italian character in such a way that thought and action, knowing and willing, shall be the same thing. The author analyzes the different aspects of this new education, discussing the programs of work, textbooks, teachers, the pedagogical value of the day's program, and the daily life of the camp leaders during the year 1931. At the Fascist academy of the Opera Nazionale Balilla at Foro, Mussolini has installed the following courses: physical education; normal, human anatomy as applied to physical education; physiology; kinematics; elements of experimental and psychotechnical psychology; anthropology; physical evaluation; hygiene; psychopathology of the developmental period; traumatology; physical therapy; medicine pertaining to gymnastics and sports; Fascist legislation; pedagogy; history of physical education; philosophy; military art; and the French and English languages.—*V. D'Agostino* (Turin).

4103. Cardenal, C., & Granada, A. *L'eficàcia del consell orientador*. (The efficiency of vocational guidance.) *Rev. de psicol. i ped.*, 1933, 1, 68-76.—This study is based on a group of 188 boys who had received vocational guidance at the Institut d'Orientació Professional de Barcelona, and were followed up in 1922 and again in 1924. The following points were investigated: change of employment and reasons for it; satisfaction in work; fatigue; and advancement. The employers were questioned at the same time as to the boys' efficiency and progress. 70% of the boys had followed the vocational advice, and among them very few had changed their employment. The authors give in tabular form comparative data on those who followed the counsel and those who did not. The first group made better records on all the above-mentioned points. The constancy of the findings after an interval of two years is noteworthy.—*M. E. Morse* (Catonsville, Md.).

4104. Carlini, A. *La nostra scuola. Avviamento alla filosofia e alla pedagogia*. (Our school. Preliminary measures based on philosophy and pedagogy.) (3rd. ed.) Firenze: Nuova Italia, 1933. Pp. 215.—The author addresses his discussion to teachers especially, and to those who are preparing themselves for elementary teaching. He explains the fundamental philosophical and pedagogical conceptions which have prompted the new order of study. After treating the culture, pedagogy, and politics in general of the old and the new school of thought, he passes to the essential problems of mind and personality in the procedure of education, discussing in succession the following problems: the world of the spirit, the esthetic problem, the problem of empirical knowledge, the world of action, history and historiography, the religious problem, mind as the pure outcome of personality, personality as the outcome of self-education, and the concept of education in the history of pedagogy. In this third edition he has changed the general form of the book and added bibliographical notes covering orientation textbooks, classical texts, philosophical and pedagogical reviews, and books on the school in its relation to religion and politics.—*V. D'Agostino* (Turin).

4105. Carroll, H. A. *Influence of the sex factor upon appreciation of literature*. *School & Soc.*, 1933, 37, 468-472.—"One thousand four hundred students, 700 girls and 700 boys, selected at random from junior high school, senior high school and college, were tested with the Carroll Prose Appreciation Test. A comparison of the scores made by the two sex groups clearly shows that (1) girls and boys are about equally variable in their ability to appreciate prose; (2) girls are more than twice as likely as boys to be found in the highest decile; and (3) girls are markedly superior to boys in their ability to appreciate prose literature, only about one third of the boys equaling or exceeding the median for girls."—*H. L. Koch* (Chicago).

4106. Crawford, A. B. *Some criticisms of current practice in educational measurements*. *Harvard Teach. Rec.*, 1933, 3, 67-81.—Criticisms are leveled against numerous assumptions and practices in cur-

rent use in educational measurements, particularly with reference to those used in educational and vocational guidance. Some of the practices inveighed against are: (1) using tests which have not passed the experimental stage as bases for guidance; (2) using poorly validated and unreliable tests; (3) regarding norms obtained under certain conditions as applicable to all situations; (4) failure to examine the truth of many assumptions underlying our testing programs.—*S. M. Stoke* (Mount Holyoke).

4107. Davis, R. A. *Research and the schools*. *J. Educ. Res.*, 1933, 26, 561-568.—Last year in education the author finds that there were published 4,651 research studies "which represent an expenditure of more than \$10,000,000 in time and money." "An examination of 13 periodicals within the field of education since 1890 reveals that there are 2,837 studies which meet the criteria for objective research." The author points out that descriptive studies have not produced fruitful results, and makes a plea for greater coordination, improvement in quantitative methods, and refinement of techniques.—*S. W. Fernberger* (Pennsylvania).

4108. Davis, R. A. *Teaching objectives in educational psychology*. *J. Educ. Psychol.*, 1933, 24, 189-194.—It is held that a course in educational psychology should achieve the following objectives: develop an understanding of those hereditary and environmental factors which underlie learning ability; provide bases for understanding the nature and principles of learning and supply the techniques for guidance in learning; provide a foundation for methods of teaching; train in the recognition of types of learning and in their application; train in the recognition and significance of individual processes and traits; provide training in recognition of external factors in the control of teacher and school; and promote ability and skill in the methods of measuring and evaluating teaching efficiency. Three more general objectives are also given.—*J. A. McGeoch* (Missouri).

4109. Downing, C. M. *A lower extension of the Inglis tests of English vocabulary. Forms X and Y*. Boston: Ginn, 1932. Pp. 4. \$0.60 each.—This test is intended to measure pupils' knowledge of words which should belong to the vocabulary of the intelligent general reader. Norms, directions for administering and scoring, correction key, and class record form included. Thirty copies of the test in each set.—*D. Shakow* (Worcester State Hospital).

4110. Durling, D., & Powell, W. *Improper school placement as a factor in juvenile delinquency*. *J. Appl. Psychol.*, 1932, 16, 519-525.—Data are presented which indicate that patients referred to certain clinics for delinquent behavior are (1) mentally retarded as a group, and (2) in many cases improperly placed in school in comparison with their mental abilities.—*E. H. Kemp* (Clark).

4111. Ferguson, G. O., Jr. *Some factors in predicting college success*. *School & Soc.*, 1933, 37, 566-568.—The first-term grades of 1709 new students in the College of Arts and Sciences of the University of Virginia were studied in relation to certain data



in the admission credentials of these individuals. It is concluded that a "student who ranks high in his high school class, has not failed in courses, is young, and has had four years in Latin or mathematics appears to be a good college risk."—H. L. Koch (Chicago).

4112. Flemming, E. G. College achievement, intelligence, personality, and emotion. *J. Appl. Psychol.*, 1932, 16, 668-674.—89 students of sophomore rank or above in a college of about 1200 students were given a series of tests and ratings. From the intercorrelations obtained, the author concludes that from a knowledge of the Thorndike score of a student in college, with his score on the Colgate schedule C2, with a satisfactory estimate of his emotional steadiness, and a record of his emotional reliability or consistency as measured by the Flemming revision of the Pressey X-O Test, we would be able to predict with some assurance his academic achievement in terms of grades.—E. H. Kemp (Clark).

4113. Freistadt-Lederer, A. Wie erziehe ich mein Kind zur Gemeinschaft? (How shall I train my child for society?) *Psychol. Rundschau*, 1933, 4, 268-269.—The home has a tendency to individualize the child. It is incumbent upon the school to socialize him. Attention is called to the difficulties of overcoming home training in this respect.—A. B. Herrig (Michigan Central State Teachers College).

4114. Garth, T. R., Holcomb, W. M., & Gesche, I. Mental fatigue of Mexican school children. *J. Appl. Psychol.*, 1932, 16, 675-680.—The same experimental materials and method were used as in Garth's previous studies of racial work curves. The Thorndike Addition Sheets were used, with 14 sheets for the younger and 21 sheets for the older group. These groups were composed of 3rd-4th and 7th-8th grade students respectively. In both "attempts" and accurately performed additions the younger group hold their own with slight fluctuation for 24 minutes, after which there is a rapid decrease in both measures. For the older group the work curve is almost on a level for 42 minutes. Upon comparison of the Mexican results with the performance of whites we find that in the case of the younger Mexicans the difference tends to be greater for "attempts" than for "accurates." The amount of overlapping found when we compare older groups of Mexicans and whites is so great that we cannot be certain of a difference. Selection, training, and nutrition are suggested as possible explanations of the tendency toward greater similarity to the whites in the older Mexican group.—E. H. Kemp (Clark).

4115. Gilliland, A. R. The nature and aims of the introductory course in psychology. *J. Appl. Psychol.*, 1932, 16, 614-622.—This is the first of a series of studies of the introductory course in psychology which is being conducted by a joint committee of the Midwestern Psychological Association and the Southern Society of Philosophy and Psychology. Major problems which are being studied are: aims, content, methods of instruction. In the present study it has been found that about half of the introductory courses

are three semester hours in length. There is no laboratory work in these courses except for demonstrations. Larger institutions emphasize scientific method and knowledge for its own sake, while smaller institutions emphasize applications and personal service in psychology. Small eastern institutions are similar to the large institutions except for a slightly greater emphasis on applications. Southern institutions, both large and small, emphasize personal service and applications.—E. H. Kemp (Clark).

4116. Gregor, A. Psychische Hygiene in der weiblichen Fürsorgeerziehung. (Mental hygiene in the education of delinquent girls.) *Zsch. f. psych. Hygiene*, 1933, 6, 48-61.—This is a description of the ideals and methods of the House of the Good Shepherd at Rastatt in Baden, and an analysis of the results in 58 cases. Most of the girls were psychopaths. The etiology of their delinquency lay in parental failure. Foster homes and orphanages are unsuitable for the care of young delinquents because they are unequal to the educational demands made by personality difficulties. Although delinquency may be first recognized after puberty, it usually goes back to childhood. Two groups of these pre-adolescent girls are recognizable: in the first, the precocious awakening of sexuality is evidenced by conspicuous dress and coquettish behavior with boys and men teachers. The second group early shows abnormal traits of a more general nature—running away, pilfering, etc.—and later an obvious transformation of the instincts. From the mental-hygiene standpoint, the rapid and extreme demoralization, emotional and intellectual, which unrestrained sex behavior produces in young girls is astonishing. Notwithstanding this, the results of educational treatment in the author's cases were decidedly favorable. The personality analysis at entrance, prognosis, progress, and results after discharge are presented in tabular form. Gregor emphasizes that the educational treatment of psychopaths in general should be entrusted exclusively to mentally high-grade persons with thorough training for the work and aptitude for teaching; also that such treatment should follow recognized educational lines. Institutional training should begin gradually with unobtrusive supervision and observation, and unfortunate early experiences should not be made the source of guilt feelings in later life.—M. E. Morse (Catonsville, Md.).

4117. Hartmann, G. W. The measurement of the relative interest value of representative items taught in elementary psychology. *J. Educ. Psychol.*, 1933, 24, 266-282.—256 statements assembled from the material in five recent texts, all true, were presented to over 400 underclassmen, all of whom had taken general psychology. The students were to rate the items in terms of interest. Reliability coefficients and relations with intelligence, age, sex, and achievement in psychology are reported. The items, which are presented in an appendix, show a marked hierarchy of interest values.—J. A. McGeoch (Missouri).

4118. Hatfield, W. W. Objective determination of punctuation. *J. Educ. Res.*, 1933, 26, 569-571.—

The starting point is the assumption that the value of punctuation depends upon its contribution to the reader's instant and correct understanding of a sentence. Three reading tests were prepared: (1) designed to measure the speed and comprehension in reading; (2) containing several initial dependent clauses which seemed to require punctuation; (3) containing several initial clauses which did not seem to require punctuation. Tests 2 and 3 were both type-written in the punctuated and unpunctuated form. The subjects were 50 college freshmen. Very slight differences were found to favor punctuation for both speed of reading and comprehension.—S. W. Fernberger (Pennsylvania).

4119. Hoffmann, A. *Menschenziehung—eine Deutung Fröbels im Hinblick auf unsere pädagogische Lage.* (Human education—an estimation by Fröbel as regards our pedagogic situation.) *Hilfsschule*, 1932, 25, 659-680.—The relation between Fröbel's thought and the modern developments of practical education, especially as regards the anthropological approach, can be seen from the following statement taken from this author's writings: "Our only hope for an education of man so true and genuine that it shall spread, blossom and bring forth ripened fruit lies in an exhaustive and adequate, an all-embracing knowledge of man, and insight into his real nature. This we can obtain only by a search so earnest that it will be extended even to his first appearance upon this earth." The author shows that the "real" qualities of man with which Fröbel was concerned are those that today constitute the distinctive subject matter of anthropology.—W. Nolte (Berlin).

4120. Hufnagel, E. *Warum lehnen wir die Koedukation für die Hilfsberufsschule ab?* (Why do we reject coeducation for the vocational correction school?) *Hilfsschule*, 1932, 25, 151-155.—Education in vocational schools should be coordinated and not consist merely in specialized training in independent techniques. If this holds for normal girls, its appropriateness for the abnormal is even more decided. With them feminine characteristics are frequently confused and misdirected in a fashion which only the most careful training can correct. They vary from obtuseness to abandon, and are in both instances likely to suffer greatly from the society in which they find themselves. From this it is clear that for weak-minded girls special training leading to a proper coordination of their judgments of value is essential.—W. Nolte (Berlin).

4121. Israeli, N. *Students' ratings of lectures: I. Comparative rating of general psychology lecture parts.* *J. Educ. Psychol.*, 1933, 24, 236-239.—Five parts of a lecture course were rated for interest by two different sections. Demonstrations were the most interesting, textbook material was least interesting. Combined non-textbook material was 2.13 and 2.99 times as interesting as textbook material to the two sections.—J. A. McGeech (Missouri).

4122. Johnson, L., Hinderman, R. A., & Ryan, H. H. *Language transfer.* *J. Educ. Res.*, 1933, 26, 579-584.—Study of the transfer of training of one or

more foreign languages to the ability to get meaning from an unfamiliar language. Each of 204 pupils of the University of Wisconsin High School was tested. Latin, French and German are offered by the school, but Spanish does not appear in the curriculum. An excerpt from a Spanish paper of an account of a football game was used, and objective methods were used to score comprehension. From an analysis of the results the authors conclude that there are four factors which affect the ability to get meaning from an unfamiliar language. In order of importance these are: extent of foreign language experience; extent of school experience; mental ability; and extent of general experience (age). So far as this ability is concerned it matters little whether the pupil spends all of his language time on one foreign language or on two or more. The gain from language study is more in the direction of vocabulary than in that of general interpretive ability. Certain sex differences are noted.—S. W. Fernberger (Pennsylvania).

4123. Judd, C. H. *Education.* *Amer. J. Sociol.*, 1933, 38, 922-930.—President Hoover called a citizens' conference on the crisis in American education. The federal Office of Education is seriously crippled as a result of the national economy program. The survey of higher education in California defines the functions of secondary education and university education. The Progressive Education Association secures a relaxation of the requirements for admission to certain colleges. Various agencies prepare materials for instruction in social studies in elementary and secondary schools. France extends free secondary education. A commission of the League of Nations criticizes Chinese imitation of American education. Adult education is extended in various centers to the unemployed.—(Courtesy *Amer. J. Sociol.*)

4124. Kline, E. J. *Significant changes in the curve of elimination since 1900.* *J. Educ. Res.*, 1933, 26, 608-616.—Study of grade enrollments from 16 of the 23 cities formally studied by Thorndike indicates that there has been a significant postponement of elimination of pupils during recent years.—S. W. Fernberger (Pennsylvania).

4125. Lane, H. A. *The education of the young delinquent.* *Educ. Trends*, 1933, 2, 30-36.—At the request of the Director of the Department of Public Welfare of the State of Illinois, the School of Education of Northwestern University has undertaken studies of the inmates of the state's institutions for the training of delinquents. One purpose is to elicit practical suggestions for the public school in preventing the development of tendencies which lead to juvenile delinquency. The author has given his attention to the St. Charles School for Boys, to which delinquents under 17 years of age are committed. The study concerns 756 boys who were in the institution in March, 1932. Findings pertaining to home and school background, mental ability, educational attainment, and interests in the various activities of the school are described in the report. The author concludes from the study of the data that the usual program and curriculum of the public school are quite



unsuited to the abilities and needs of the St. Charles boys. General principles which should be used in adapting the ordinary school program to the needs of handicapped children are discussed.—*H. W. Karn* (Clark).

4126. *Lehrer, L.* [The psychology of the teacher's personality.] *Vivobleter*, 1932, 4, 97-119.—The author presents the personality characteristics necessary in teachers as indicated in numerous sources, including ancient and modern authorities such as Plato, the Talmud, Bird, Washburne, etc.—*D. Shalow* (Worcester State Hospital).

4127. *Line, W.* Educational alibis. *Ment. Hygiene*, 1933, 17, 246-265.—We must learn to cultivate interest in given directions as well as to encourage habits of concentration and of responsibility. Before the problem is approached from this angle it is necessary to have a clear conception of the functions that constitute conscious behavior. Most of our errors arise in connection with an assumed functionalism. The mental test has been instrumental in perpetuating this pseudo-functionalism. Spearman's method of analysis of mental functions is cited as the outstanding development along the lines of mental testing. Labeling a child superior or inferior, etc., does nothing that is in itself helpful. There are limitations of educability, but not of potentiality. This places the burden of selecting varying methods for different children in solving scholastic problems upon the teacher.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.).

4128. *Line, W.* Mental hygiene and progressive education. *Ment. Hygiene*, 1931, 15, No. 4.—*R. R. Willoughby* (Clark).

4129. *Loczka, A.* [New principles in the teaching of biology.] *Magyar Paedagogia*, 1932, 41.—The following three principles are to be realized in education: put children in their right social environment, give them opportunity for creative work, and show them the practical value of their work. These principles may be realized in the teaching of biology by observing the following rules: Instead of teaching systematic, scientific data, bring life itself into the school as it appears in nature and in the environment of the child. The interrelations between the life of the child and the life of the environment must be the basis of teaching. Instead of anatomy, teach the functions of the organs, and instead of systematology, teach important types of plants and animals. Give children opportunity to make their own observations, their own experiments; encourage them to draw conclusions of their own and to think for themselves. Include everything connected with biological facts that may be of value in the life of children. The interest of children very often does not respect the limits set up by the course of study; follow the line of their interest and use every point of contact with economics, household arts, hygiene, agriculture, etc. Every practical aspect of the subject matter should be dealt with in the school, in order to open the eyes of the pupils to such questions and to awaken their

interest for problems of every-day life.—*P. Ranschburg* (Budapest).

4130. *Louttit, C. M., & Patrick, J. R.* A study of students' knowledge in the use of the library. *J. Appl. Psychol.*, 1932, 16, 475-485.—The Library Information Quiz was given to 441 students, men and women representing the four academic classes, during a regular class hour in the second semester of the academic year 1930-31 at Ohio University. It seems a reasonable hypothesis that during each of the four years of college students should become better acquainted with the library and acquire facility in its use. The tabulated data presented do not support this hypothesis. Knowledge in the use of the library appears to be more closely related to students' general ability, as measured by the Ohio State University entrance examinations, than to educational achievement as measured by point-hour ratio.—*E. H. Kemp* (Clark).

4131. *Majewski, F.* Ergebnisse einjähriger Beobachtung der mit Lipatren behandelten Kinder und ihrer Partner an den Hilfsschulen IV, VI und XIX. (The results of one year's observation of children treated by the Lipatren method, and of their companions in the correction schools IV, VI and XIX.) *Hilfsschule*, 1932, 25, 144-147.—18 correction school children were selected on the basis of capillary microscopy for special treatment by the Lipatren (Jaensch's) method. A control group of 15 other children was also studied. Both groups were rated by their teachers as being equal in mental development. The experimental group was found to improve in school work and intelligence quotient more than the control group did. The author is nevertheless unwilling to make any special claims for this treatment because of the small number of cases; the amount of improvement was also not very great.—*W. Nolte* (Berlin).

4132. *McGinnis, W. C.* Basic courses and topics in the training of the elementary school principal. *J. Educ. Res.*, 1933, 26, 597-600.—Questionnaire answered by 124 professors of education, 149 city school superintendents, and 99 elementary school principals. In the section on psychological training the following topics rate high: mental and educational tests, psychology of adolescence, diagnosis and remedies, and psychology of elementary school subjects. The tables throughout indicate a complete lack of agreement as to what constitutes desirable basic courses and basic topics in the professional training of the elementary school principal.—*S. W. Fernberger* (Pennsylvania).

4133. *Miller, D. W.* An orientation in educational psychology. Boston: Gorham Press, 1932. Pp. 234. \$2.00.—The author has kept three aims in mind in preparing the present volume: (1) to motivate the study of educational psychology by showing how the subject contributes to the successful guidance of learning activities; (2) to present problems for solution which would be typical of those likely to be met in actual teaching; and (3) to include a large number of reading references. The problem approach is used throughout, there being 70 problems in the

book. Provisions are made for written reports at the conclusion of the study of each problem. A reference list of 676 titles is appended, and these are classified by problems.—*L. A. Averill* (Worcester Teachers College).

4134. Patry, F. L. *The philosophy and objective aims of modern education.* *Ment. Hygiene*, 1931, 15, No. 3.—*R. R. Willoughby* (Clark).

4135. Patry, F. L. *The place of the psychiatrist in a state education department or school system.* *Ment. Hygiene*, 1931, 15, No. 4.—*R. R. Willoughby* (Clark).

4136. Perrin, P. G. *Commensurate grading of English compositions.* *School & Soc.*, 1933, 37, 386-387.—*H. L. Koch* (Chicago).

4137. Powers, F. F., & Uhl, W. L. *Psychological principles of education.* New York: Century, 1933. Pp. xvi + 570. \$2.50.—Although this book is written for beginners in educational psychology, it will be found to be of value to teachers. It adopts as its thesis the point of view that education is "the improvement of whatever one does." Part I treats of the individual's development in modern society. An attempt is made to present the bases of conduct clearly without stressing the highly technical side of neuro-anatomy, which is of only minor importance to the beginner. The mental functions through which behavior takes place are stressed as being "interrelated and integrated currents of the progressive adjustment of the individual," rather than "separable faculties." The subject of motivation is treated in some detail and is supported by data from the most recent research in this field of psychology. Part II is devoted to the psychology of teaching and types of teaching procedure. The eight outstanding types of procedure of modern education are evaluated. In Part III, emphasis is placed on the statement that the curricula exist solely to aid the learner in his gradual development. Normal and abnormal conduct are given a prominent place in Part IV. Normality as well as abnormality are relative terms. The improvement of conduct as a part of educational activity is emphasized as being of utmost importance. A bibliography is appended to each chapter. There are also an author index and a topic index.—*H. S. Clapp* (Children's Village, Dobbs' Ferry, N. Y.).

4138. Prauttsch, K. *Zur Problematik des Aufnahmeverfahrens in der Hilfsschule.* (The problems arising in connection with admissions to the correction school.) *Hilfsschule*, 1932, 25, 649-658.—Correction school applicants must be classified as regards both intelligence and personality traits. Three psychological methods, all of which make contributions to these problems, are specified: natural science, mental science, and the science of personality. In passing upon applicants it is necessary to judge them in terms of observations, investigations and evaluations—all of which must be made from the psychological point of view. The author does not defend any one method as being alone adequate for these needs.—*W. Nolte* (Berlin).

4139. Rodgers, G. S. *A critical study of the grammatical errors of junior high school pupils.* *J. Appl. Psychol.*, 1932, 16, 421-426.—The extent and nature of grammatical errors made by junior high school students of Los Angeles in free composition were determined and a comparison made of their standing before and after remedial drill. It was found that a significant decrease (19.4%) in number of errors had taken place, presumably as a result of three weeks of daily drill in the most prevalent types of error.—*E. H. Kemp* (Clark).

4140. Smeltzer, C. H. *Improving and evaluating the efficiency of college instruction.* *J. Educ. Psychol.*, 1933, 24, 283-302.—Experimental sections in educational psychology were taught by means of certain special procedures involving organization of the work into units, objective tests with knowledge of progress, reviews for the poorer students, and definite attempts to raise the standards of work. The control sections were taught by means of informal lecture and discussion without the special features used with the experimental groups. By the use of the experimental procedures it was found that the passing point could be raised by more than a fourth without affecting the percentage of students receiving credit. Individual differences are discussed in some detail.—*J. A. McGeoch* (Missouri).

4141. Stalnaker, J. M. *Attitudes toward intercollegiate athletics.* *School & Soc.*, 1933, 37, 499-504.—Using an attitude scale developed according to Thurstone's procedure, the author has attempted to compare the attitudes toward intercollegiate athletics of various groups ranging in size from 205 to 3545 and drawn with few exceptions largely from individuals associated in one way or another with the University of Minnesota. Since the circularization of the groups yielded a return of from 30 to 100%, selective influences probably color the results. The attitude toward athletics of the populations investigated proved favorable in general, the major groups arranged in terms of degree of favorableness being: "M" men, parents of athletes, undergraduates, editors, general public, alumni, parents of non-athletes, high school executives, graduate students, university faculty, and college and university presidents. In the case of the faculty and college presidents the more radical members of the middle two thirds were clearly opposed to intercollegiate athletics. The other variables investigated in relation to attitude toward athletics were sex, age, major sport interest, academic rank, advancement in college, years since graduation, and kind and location of schools in which the responding administrators were found.—*H. L. Koch* (Chicago).

4142. Stern, K. *Wille, Phantasie und Werkgestaltung in einem erweiterten Montessori-System.* (Will, fantasy and the organization of activity in an expanded Montessori system.) Leipzig: Quelle & Meyer, 1933. Pp. 104. RM. 3.50.—This is the second of two books and itself goes beyond the Montessori system with which the first had closed. In stressing the need for adapting pedagogy to the



child's natural maturation the expanded system emphasizes throughout the importance of exact psychological observation. A large selection of examples is given to illustrate the procedure for development of the will. The situation of each child is considered separately. Habit, attitude and agreement (*Vertrag*) constitute the preliminary steps in "insight training" and the goal is "insightful guidance of the will" for each child. The discussion of fantasy begins with the question how much a child's natural play and creative activity should be subjected to the guiding influence of training. The answer has already been supplied by numerous studies of maturation: fantasies in children are really expressions of their rather primitive experience. It is from this point of view that the attitude which the teacher should take toward childish lies, magic, fairy tales, etc., is discussed. As regards the organization of activity (*Werkgestaltung*) the author illustrates by means of numerous drawings that this is not merely a representing of figures, but also a process of ornamentation. This latter has heretofore received too little appreciation on the part of kindergarten teachers. The system presented here is a bridge between the Montessori method and that of Friedrich Fröbel.—*K. Stern* (Breslau).

4143. Symonds, P. M., & Block, V. L. *Student questionnaire, with manual of directions*. New York: Bureau of Publications, Teachers College, Columbia University, 1932.—This questionnaire is designed to furnish an objective means of measuring pupils' personal and social adjustments in high schools and junior colleges. The inventory consists of 101 items selected from typical adolescent experience. It may be used in grades 7-14, and can be administered in 40 minutes. It is hoped the questionnaire will be valuable in helping the school locate, diagnose and remedy individual and group maladjustments.—*L. A. Averill* (Worcester Teachers College).

4144. Toops, H. A. Some considerations relative to the standardization of certain procedures in educational research. *J. Exper. Educ.*, 1933, 1, 229-238.—The author discusses the need for standardization of procedure in educational research, particularly when data are to be treated with calculating machines. Various standardizing techniques are suggested.—*H. W. Karn* (Clark).

4145. Torgerson, T. L., & Aamodt, G. P. The validity of certain prognostic tests in predicting algebraic ability. *J. Exper. Educ.*, 1933, 1, 277-279.—The purpose of this study was to determine the validity of two aptitude tests in algebra as compared with an intelligence test. The tests chosen were the Lee Test of Algebraic Ability, the Orleans Algebra Prognosis Test, and the Otis Self-Administering Test of Mental Ability, Higher Examination. The tests were administered to 236 9th-grade pupils in the Muskegon, Michigan, High School. All three tests were found to be about equally valid and effective in predicting grades in algebra. The aptitude tests were about equally efficient in setting up a critical score below which the students' chances for success were slight. The sharpest discrimination was made

by the intelligence test, as 22 of the 23 pupils with intelligence quotients below 90 failed in algebra at the end of the year.—*H. W. Karn* (Clark).

4146. Troili, C. Contributo alla psicopatologia degli alunni "gracili" delle scuole all'aperto. (Contribution to the psychopathology of delicate students of open air schools.) *Riv. di psicol.*, 1933, 29, 33-40.—*T. M. Abel* (Sarah Lawrence).

4147. Turbiglio, F. L'educazione dei figli. Idee sempre giovani di un nonno vecchio. (The education of boys. The ever young ideas of an elderly grandfather.) Turin: Paravia, 1932. Pp. 168.—The author gives his observations, suggestions, and general conclusions based upon his experiences in educating boys. He begins with the marriage of the parents, going to the time of the marriage of the younger generation. The work of education should rest essentially upon three moral forces: veneration and love for the parents, the sense of personal dignity, and the sense of responsibility. Order, method, and discipline exercise a very great influence upon good education. Turbiglio points out, also, that a psychological knowledge of the thoughts and feelings present in each stage of development should be a constant guide to educators in their physical, intellectual, and moral training of young people.—*V. D'Agostino* (Turin).

4148. Velinsky, S. Est ce qu'on peut élever le niveau d'efficacité du travail scolaire? (Can the level of efficacy of scholastic work be raised?) *Pour l'ère nouvelle*, 1932, 11, No. 78.—In giving work to the student and in leaving him responsible for the results of his work, his independence and moral strength are exercised, and scholastic work in individualized schools is reduced to giving work and making the child do it. During work, his energy is tied to useful activity; the discipline of work is healthy, and prepares him for life in society. But the demand for total individualization of the methods of education according to the individual types of the students cannot be met until psychologists have found correlations between each method of teaching and each type of temperament. This requires a profound knowledge of personality.—*Math. H. Piéron* (Sorbonne).

4149. Walker, J. F. Overlapping again. *School & Soc.*, 1933, 37, 427-428.—To test the overlapping between the content presented in an introductory course in general psychology and the content given in an introductory course in educational psychology required of all sophomores in the College of Education at the University of Arizona, a comprehensive examination covering the work done in educational psychology was given to 96 students who had just completed the course in general psychology and were about to begin their work in educational psychology. This same comprehensive test was administered as the final examination for the latter course. There was practically no overlapping on the scores made on the preview and final tests, the mean scores for the two examinations being 54.4 and 126.4; the sigmas of the distributions, 17.2 and 11.25.—*H. L. Koch* (Chicago).

4150. Watson, G. The demand for psychological counselors in education. *Ment. Hygiene*, 1931, 15, No. 3.—R. R. Willoughby (Clark).

4151. Weiz, A. Versuch einer Auswertung der geisteswissenschaftlichen Strukturpsychologie für die heilpädagogische Praxis. (An attempt to determine the applicability of mental science (as expressed in structural psychology) to corrective teaching.) *Hilfsschule*, 1932, 25, 106-114.—A survey of structural psychology (*Strukturpsychologie*) raises 3 problems regarding corrective teaching: (1) What is the principal value of distinguishing different types among the individual pupils of a correction school? (2) What are the abilities of weak-minded children to experience and to be creative? (3) Can weak-minded children ever comprehend normal adults—or, conversely, can a teacher really (e.g. "emphatically") understand these children? The results of the study may be summarized thus: (1) The abnormal child must be judged not in terms of independent characteristics separately considered, but from the totality of such phenomena, especially as regards their structural unity. (2) One must always take into consideration the "typifying" effect which very early appears in all cases of abnormality. (3) Group instruction (in school classes) must be abandoned—at least in German—and for it an arrangement substituted whereby more individual instruction is given. (4) More emphasis should be placed upon the teaching of adequate value judgments. (5) The method of pictorial descriptions should be employed wherever that of specific tasks fails. (6) The correction school teachers should be in constant contact with the parents of their pupils.—W. Nolte (Berlin).

4152. Whitney, F. L., & Milholland, J. The relationship of teachers college preparation to subjects taught after graduation. *School & Soc.*, 1933, 37, 533-536.—H. L. Koch (Chicago).

4153. Williams, F. E. Mental hygiene and the college; levels of mental-hygiene work. *Ment. Hygiene*, 1931, 15, No. 3.—R. R. Willoughby (Clark).

4154. Williamson, E. G. The relation of learning to spelling ability. *J. Educ. Psychol.*, 1933, 24, 257-265.—"Within the limitations of this experiment we may state that in the usual classroom learning conditions an individual is not likely to be a 'good' speller unless he has 'high' intelligence and works hard. If he has very low intelligence, however, and is adequately motivated, he may improve his skill in spelling. Therefore, even though the coefficient of correlation between spelling and intelligence is only .72, we have cited evidence that the latter is a very important factor in spelling ability." No evidence is found in support of the popular belief that anyone can learn to spell if he tries hard enough.—J. A. McGeoch (Missouri).

4155. Wilson, M. O., & Hodges, J. H. Predicting success in the engineering college. *J. Appl. Psychol.*, 1932, 16, 343-357.—This is the report of a study in predicting success in the College of Engineering of the University of Oklahoma, based on the records of 107 students. The criterion is scholarship, as represented

by honor points, in courses in advanced engineering on the undergraduate level. The independent variables are the honor points gained in certain freshman engineering courses, namely, mathematics, introductory engineering and mechanical drawing, and the score on the Otis Advanced Intelligence Scale. A kind of critical score technique is used in comparing the predicted scores with the observed scores. Of 36 exceptional students (i.e., students whose honor points lie above or below the critical points) 86% could have been fairly definitely placed with respect to their potential ability in advanced engineering courses at the end of the freshman year. The score on the Otis Advanced Intelligence Scale and honor points in freshman courses constitute "only a fairly accurate basis" for determining potential ability of students in advanced engineering courses.—E. H. Kemp (Clark).

4156. Wolf, E. Fehleranalyse aus Abschriften und Diktaten einer 4. Hilfsschulklasse (3. Hilfsschuljahr). (An analysis of errors in the copying and dictation work of a 4th-year correction school class (3rd year at the correction school).) *Hilfsschule*, 1932, 25, 222-235.—This study is based upon those of Kiessling, Ranschburg, and (especially) Weimer. Results secured from 10 cases are divided into the following groups: (1) below, (2) precisely congruent with, and (3) above the average of all errors made. Four times as many errors were made in copying as in dictation. The errors, listed in decreasing frequency, were: errors of discrimination, of perseverative predetermination, of incompetence, of after-effect, and, finally, of similarity (as described by Ranschburg). No one type of error was predominant throughout. In the first group the principal error was that of similarity; the second group erred chiefly in perseverative predetermination; in the last group discriminative errors were most prominent. An analysis of mistakes in dictation showed errors of discrimination to predominate for groups 2 and 3, perseverative predetermination for group 1.—W. Nolte (Berlin).

4157. Wood, E. P. Examining the uses of examinations. *Harvard Teach. Rec.*, 1933, 3, 59-66.—A critical examination of some of the uses of examinations, e.g., as educational stimuli, to determine the curriculum, to aid in teaching, to raise standards, to provide guidance.—S. M. Stoke (Mount Holyoke). [See also abstracts 3905, 3918, 3919, 3924, 4006, 4016, 4021, 4064, 4160, 4163, 4179, 4200.]

## BIOMETRY AND STATISTICS

4158. Ackerson, L. In disagreement with E. A. Lincoln's article "The unreliability of reliability coefficients." *J. Educ. Psychol.*, 1933, 24, 233-235.—This discussion of Lincoln's article (*J. Educ. Psychol.*, 1932, 23, 11-14) favors the conclusion that "there is no substitute for reliability correlations in studies based upon variate data."—J. A. McGeoch (Missouri).

4159. Cureton, E. E. The standard error of the Spearman-Brown formula when used to estimate the length of a test necessary to achieve a given



reliability. *J. Educ. Psychol.*, 1933, 24, 305-306.—The formula is given and briefly discussed.—*J. A. McGeoch* (Missouri).

4160. Cureton, E. E. Validation against a fallible criterion. *J. Exper. Educ.*, 1933, 1, 258-263.—A consideration of the problems which arose in attempting to validate a battery of tests against the criterion of success in college. The author stresses the fact that success in college depends upon a multiplicity of factors such as the intelligence and interest of the student, the amount of studying he does, the scholastic standards of his particular instructors, the validity and reliability of the examinations and the tests he takes, and the number and variety of outside activities in which he engages. Therefore the battery of tests should be validated against these systematic factors in the student, freed if possible from the disturbing effects of the unreliability of the marking system and even of those fluctuations in attitude and application that cause a student to do better or worse at one time than at another.—*H. W. Karn* (Clark).

4161. Ezekiel, M. Reply to Dr. Lindquist's 'further note' on matched groups. *J. Educ. Psychol.*, 1933, 24, 306-309.—Reply to paper in *J. Educ. Psychol.*, 1933, 24, 67-69.—*J. A. McGeoch* (Missouri).

4162. Griffin, H. D. Constructing a prediction chart. *J. Appl. Psychol.*, 1932, 16, 406-412.—The author shows how prediction from a linear regression equation may be facilitated by simple charting and describes the method of construction of the charts.—*E. H. Kemp* (Clark).

4163. Heilman, J. D. The translation of scores into grades. *J. Educ. Psychol.*, 1933, 24, 241-256.—Three different procedures for translating scores into grades are compared: a combination of the teachers' methods, the 1.6 Q-Md method, and the 1.6 Q-CMd method. According to the second method the class median was taken as the mid-value of a C and a distance on the scale of scores of 1.6 Q was taken as the range for each grade. The third method allows for variations in intelligence. "For example, if the median of the class on the intelligence scale is one-half Q above that for college students in general, the point in the distribution of test-scores for the mid-value of C is selected one-half Q on the test distribution below the median of the class." A replacement of the teachers' methods by 1.6 Q-Md changes 30% of the grades; replacement by 1.6 Q-CMd changes 35%. Evidence is presented for the superiority of the latter method.—*J. A. McGeoch* (Missouri).

4164. Horst, P. Measurement, relation and correlation. *J. Phil.*, 1932, 29, No. 23.—*R. R. Willoughby* (Clark).

4165. Lincoln, E. A. Reliability coefficients are still unreliable. *J. Educ. Psychol.*, 1933, 24, 235-236.—The author holds that the critics of his paper (*J. Educ. Psychol.*, 1932, 23, 11-14) have stated only why the difficulty with reliability coefficients occurs but that they have not explained it away.—*J. A. McGeoch* (Missouri).

4166. Maker, P. T. A proof that pure induction approaches certainty as its limit. *Mind*, 1933, 42, 208-212.—*H. Helson* (Bryn Mawr).

4167. Monroe, W. S. Standardization of statistical symbolism. *J. Exper. Educ.*, 1933, 1, 223-228.—Since statistical symbols are used as instruments of communication as well as of personal convenience, uniformity of meaning is highly desirable, if not imperative, for those most commonly used. It is also desirable that the symbols conform to a system. With these needs in mind the author presents a list of symbols which might serve as a basis for standardization. For the most part the list has been restricted to symbols strongly supported by current practice.—*H. W. Karn* (Clark).

4168. Monroe, W. S., & Stuit, D. B. The interpretation of the coefficient of correlation. *J. Exper. Educ.*, 1933, 1, 186-203.—An interpretation of the coefficient of correlation with respect to the following questions: (1) When a regression equation, derived from a correlation table, is used as a formula of prediction, how accurate are the predictions? (2) When  $r$  is a coefficient of reliability, what is the magnitude of the variable errors of measurement? (3) Given two sets of paired measurements, what degree of relationship between them does a given value of  $r$  designate?—*H. W. Karn* (Clark).

4169. Royer, E. B. A simple method for calculating mean square contingency. *Ann. Math. Statist.*, 1933, 4, 75-78.—The formula for chi-square is simplified and an illustration is given of the solution for chi-square by the use of a calculating machine with the new formula. "The advantages of this method are two-fold: (1) there is considerable saving of labor; (2) with the simplification of calculations, we have greatly reduced the danger of errors caused by dropping of decimal places."—*A. K. Kurts* (Procter & Gamble Co., Ivorydale, Ohio).

4170. Stroop, J. R. Is the judgment of the group better than that of the average member of the group? *J. Exper. Psychol.*, 1932, 15, 550-562.—If a large number of judgments or rankings of a series of lifted weights, by the same subject or by different subjects are grouped, correlated with the true order, and averaged, the result will be an increase in validity. This increase is not due to the fact that the judgments were made by different people, but to the mathematical principle involved in Gordon's method of combining the data. When ten weights are used the increase in validity follows that predicted by the Brown-Spearman formula.—*S. Renshaw* (Ohio State).

4171. Thurstone, L. L. A simplified multiple factor method and an outline of the computations. Chicago: Author, 1933. Pp. 25.—A supplement to the author's previous monograph *The Theory of Multiple Factors*. A "center of gravity" method is substituted for the least square method, with the saving of a great deal of labor. Full directions and illustrations are given for the solving of a nine-variable problem (reduced to three common factors).—*R. R. Willoughby* (Clark).

4172. Toops, H. A. A frequency-product method of obtaining the standard deviation. *J. Exper. Educ.*, 1933, 1, 255-257.—A description of the various steps to be used in obtaining the standard deviation by a frequency-product method.—H. W. Karn (Clark). [See also abstracts 4037, 4144, 4173, 4179, 4189.]

## MENTAL TESTS

4173. Adams, H. F. The two-factor theory of ability: reply to Dr. R. H. Thouless and rejoinder. *J. Appl. Psychol.*, 1932, 16, 572-576.—E. H. Kemp (Clark).

4174. Babcock, H. The short Army Performance Scale in clinical practice. *J. Appl. Psychol.*, 1932, 16, 532-548.—In this study a comparison is made of results obtained with the Terman Scale (long form with no substitution of alternates for the regular tests) and those using six tests of the Army Performance Scale: ship, manikin and profile, Knox cube, memory of designs, digit-symbol, and maze. It is pointed out that in the use of this short Army Performance Scale as an intelligence test subjects below thirty years of age score higher than their mental age, the greatest difference being from 12 to 15 years of age. Mention is made of the fact that the six-test scale was not particularly recommended by its originators.—E. H. Kemp (Clark).

4175. Broom, M. E. Note on the validity and reliability of the total scores yielded by the Pressey X-O Test of the Emotions. *J. Appl. Psychol.*, 1932, 16, 681-683.—303 students in the San Diego State Teachers College served as subjects of the study. 150 of them also gave self ratings. Neither the total emotional affectivity scores nor the total emotional idiosyncrasy scores were highly reliable. The self ratings for total emotional affectivity and for total emotional idiosyncrasy were equally unreliable. Few of the validity coefficients indicated even a marked degree of relationship, indicating that the several series of scores, of self ratings, and of ratings by others did not measure the same thing or things in the same amount. Apparently, then, the usefulness of the test lies in the analysis which it yields, since the total scores yield results of little significance.—E. H. Kemp (Clark).

4176. Cattell, P. The Heinis personal constant as a substitute for the IQ. *J. Educ. Psychol.*, 1933, 24, 221-228.—It is concluded that "the Heinis Personal Constant is more constant than the IQ for children below average in intelligence, at least when based on linguistic test, but that for children of above average intelligence it is less constant than the IQ. There is some indication that the gain in Stanford-Binet IQ of superior pupils with age may be a function of the particular test rather than of the IQ technique."—J. A. McGeoch (Missouri).

4177. Conrad, H. S., Jones, H. E., & Hsiao, H. H. Sex differences in mental growth and decline. *J. Educ. Psychol.*, 1933, 24, 161-169.—"The Army Alpha intelligence examination was administered to five hundred eighty-one males and six hundred seven

females in a representative rural group between the ages of ten and sixty. A general slight superiority of females to males is observed; this superiority (as in physical growth curves) is greater during early adolescence, but is at no age sufficiently marked to be of great practical significance." This sex difference varies with the sub-test. In four strongly verbal sub-tests the males are rather consistently inferior; in numerical completion and general information the differences are slight; in arithmetic problems the males are definitely superior. "It is clear, then, that the direction and extent of sex differences in a composite mental test is dependent upon the composition of the test and the weighting of its parts."—J. A. McGeoch (Missouri).

4178. Fick, M. L. A mental survey of the Union of South Africa. *So. Afric. J. Psychol. & Educ.*, 1932, 1, 31-46.—A three-years' study of a representative sampling (some 25%) of the school population (ages 10, 11, 12) of the entire Union, discovers as positively mentally defective 0.79% and as subnormal (including the former) 8.91%. Applied to the population as a whole, these proportions become 0.75% and 8.59%. If institutional inmates be included the former figure rises to 0.86%. Careful analysis of conditions makes it impossible to divide the Union into simply urban and rural areas. The classification adopted in consequence yields the following tabulation:

	%	% with IQ less M.D. than 80
Class 1 (towns or cities over 20,000)	.30	2.62
Class 2 (ditto, 8001 to 20,000)	.29	3.69
Class 3 (ditto, 2001 to 8000)	.64	8.39
Class 4 (ditto, 1001 to 2000)	1.15	8.28
Class 5 (villages, up to 1000, and rural)	1.06	14.50

The discrepancy between these results and those of the English Committee's investigation, 1929, is accounted for in terms of errors of sampling. Three tables are submitted.—O. L. Harvey (Cambridge).

4179. Horst, P. The difficulty of a multiple choice test item. *J. Educ. Psychol.*, 1933, 24, 229-232.—A formula is given for determining the difficulty of an item in terms of its standard deviation. It follows from the analysis that fewer alternatives, equal in difficulty, may result in a smaller chance factor in the answer than will a greater number of alternatives unequal in difficulty.—J. A. McGeoch (Missouri).

4180. Humm, D. G. A chart for the better evaluation of intelligence quotients. *J. Appl. Psychol.*, 1932, 16, 91-96.—"The intelligence quotient of a subject may be obtained by dividing his mental age by the average mental age of subjects of his chronological age." The computation of the intelligence quotient is considered, with its relation to the growth curve of intelligence. A chart is presented "for the convenient calculation of intelligence quotients with Otis' mental ages as the divisors."—R. S. Schults (Psychological Corporation).

4181. Hunsicker, L. A comparison of scores on two college freshmen intelligence tests. *J. Educ. Res.*, 1933, 26, 666-667.—Comparison of scores given



to 220 freshmen at the Milwaukee State Teachers College for the Thurstone Psychological Examination, 1929 edition, and the Thorndike Intelligence Examination for High School Graduates, Series 1925-1930, forms S-L-O. The author presents a table for converting the scores on one test into scores on the other.—S. W. Fernberger (Pennsylvania).

4182. Hutt, M. L. The Kohs block-design tests. A revision for clinical practice. *J. Appl. Psychol.*, 1932, 16, 298-307.—Using the revised scoring method described in an earlier paper, the author examines results obtained with the Kohs block-design tests and finds that of three factors, success, speed and moves, the third is of no value for increasing either the diagnostic value of the test or its validity. He finds that the test appears to measure well what it measures, but large discrepancies may be expected between the Kohs test and the Binet test results in some cases.—E. H. Kemp (Clark).

4183. Jones, H. E., & Conrad, H. S. The growth and decline of intelligence: a study of a homogeneous group between the ages of ten and sixty. *Genet. Psychol. Monog.*, 1933, 13, 223-298.—The present report is derived from a community survey conducted in 19 villages of Massachusetts, New Hampshire and Vermont. The population was entirely native-born. The technique involved the use of a free motion-picture performance and supplementary house-to-house visiting. Army Alpha tests were administered under one or the other of these two situations. In these ways data were collected on Army Alpha scores for 1191 subjects between the ages of 10 and 60 years of age. The developmental curve thus secured for the total Alpha test "may be summarized as involving linear growth to about 16 years, with a negative acceleration beyond 16 to a peak between the ages of 18 and 21. A decline follows which is much more gradual than the curve of growth but which by the age of 55 involves a recession to the 14 year level." The curves for sub-tests within the Alpha show important differences among themselves. The subjects from more rural districts made consistently lower scores than those from villages. A slight superiority of females over males was observed. A differential rate of growth (as between bright and dull adolescents) is found, but there seems to be no evidence for a differential duration of growth. The decline of ability beyond age 21 "is not due to errors of sampling" nor to "faulty administration of the Alpha" nor to "failure of motivation, remoteness of schooling, lack of understanding of directions, disproportion in attention to accuracy versus speed, lack of practice in the test functions, failing hearing or failing eyesight." In fact, "the information tests of the Alpha present an unfair advantage to those in the upper age brackets." A bibliography of 33 titles is appended.—F. M. Teagarden (Pittsburgh).

4184. Jones, L. W. Present day theories of intellectual factors (general, group and specific). *Brit. J. Educ. Psychol.*, 1933, 3, 1-12.—Spearman's *General Intelligence Objectively Determined and Measured*, 1904, is credited as the beginning of the study of

factors in place of faculties, with the theory of two factors as the basic concept dealing with a general factor  $g$  and a number of group factors, and with the tetrad-difference criterion as the fundamental tool for analysis. Thomson's sampling theory implies a number of factors without denying or confirming the relationships advocated by Spearman. Kelley's researches tend to confirm the work and theory of Spearman.—K. M. Cowdery (Stanford).

4185. Krueger, W. C. F. Distributions of scores based on correct guessing for true-false tests of various lengths. *J. Educ. Psychol.*, 1933, 24, 185-188.—It is found, by the use of tests varying from 10 to 500 items in length, that chance guessing may often yield very high or very low scores in short tests, but that this probability is almost eliminated in the longer tests. On the longer tests practically all scores ranged within 45 to 55% of the total test. Use of "right minus wrong" is the true score" is adequate for the longer tests.—J. A. McGeoch (Missouri).

4186. Lambercier, M. L., & Popescu Teinsan, E. Tests préscolaires. (Preschool tests.) *Pour l'ère nouvelle*, 1932, No. 78. Pp. 133.—This is the publication of Hallowell's tests, which, although not properly speaking a scale, since they only review a few functions, nevertheless give an exact idea of the development of the child from 24 to 36 months. What appears predominantly in these tests is form discrimination, motor coordination, perseverance, and distributed attention. They also permit an evaluation of the capacity to learn and to profit by acquired experience, through the progress realized in the course of a test or a series of tests. The authors have applied these preschool tests to Rumanian children in order to compare them with American children tested in the same way.—Math. H. Piéron (Sorbonne).

4187. Lauderbach, J. C., & Hause, E. On the reliability and validity of derived scores yielded by the McCall Multi-Mental Scale. *J. Appl. Psychol.*, 1932, 16, 322-323.—150 pupils in grades 4-6 in the Chula Vista, California, elementary school took the McCall Multi-Mental Scale twice. The Pearson  $r$  representing the degree of relationship between the two paired series of scores is  $.791 \pm .021$ . The range in IQ score values on the first was 64-162, with a mean of 107.4 and a standard deviation of 18.4; on the second, 62-168 with a mean of 105.8 and a standard deviation of 20.3.—E. H. Kemp (Clark).

4188. Lincoln, E. A. Preliminary report on the Stanford Binet IQ changes of superior children. *J. Exper. Educ.*, 1933, 1, 287-292.—The author became interested in the problem of IQ changes among superior children because of an apparent contradiction between the results obtained by Terman in his study of gifted children in California and those obtained by Cattell in her analysis of the Harvard growth study data. The children whose records are presented in this report have been tested throughout by the author. This gives an element of constancy which has not appeared in other investigations. The cases come from three towns which make a practice of admitting to the kindergarten and first grade chil-

dren who are under the chronological age limit, if they obtain a Stanford-Binet mental age which equals or surpasses the required chronological age. Up to the present time, 92 children with initial IQ's of 119 or over have been re-examined at intervals ranging from 5 to 8 years. In general, an analysis of the data shows that gifted children selected on the basis of a single initial Stanford Binet IQ are likely to lose rather than gain, on the average, and that the girls are likely to lose more than the boys.—*H. W. Karn* (Clark).

4189. *Lindquist, E. F., & Cook, W. W. Experimental procedures in test evaluation. J. Exper. Educ., 1933, 1, 163-185.*—The major purpose of this study has been to demonstrate the application of a new experimental procedure for controlling the time factor in test evaluation and to raise certain theoretical issues for the test experimenter. The chief conclusions and implications drawn from the findings are summarized as follows: (1) The nature of the relationships between reliability and validity and the length of the administration period have been determined for certain self-administering spelling tests. For these tests, increases in the administration time result in increases in validity and in decreases in reliability, until a certain period is reached beyond which both validity and reliability tend to remain constant. (2) The optimum rate of administration for each of certain self-administering spelling tests has been determined. The types involving recall show the slowest optimum rate. The right-wrong type, when correction is to be made for guessing, should be administered with a shorter time than when no such correction is to be made. (3) Six types of self-administering spelling tests have been ranked in order of their validity for a standard administration period when each type is administered at its own optimum rate. Those involving recognition only are least valid, while those involving recognition plus recall yield the highest validities. (4) Corrections for guessing have been shown to increase the validity of certain recognition types of tests, particularly the right-wrong type. (5) The practical limit in validity for self-administering spelling tests of the types investigated is closely approached in tests of 12 minutes or less in length.—*H. W. Karn* (Clark).

4190. *Line, W., & Hedman, H. B. A simplified statement of the two-factor theory. J. Educ. Psychol., 1933, 24, 195-220.*—This paper represents the "first steps of an attempt to present the basic theorems underlying the factor theory, in a manner that can be appreciated by those unacquainted with the higher mathematics." The outline of the paper is as follows: introductory statement of the meaning of correlation; development of a formula for determining the coefficient of correlation; the effect of errors upon  $r$ ; need for correlation of  $r$ ; the correction for attenuation; the tetrad criterion; the significance and reliability of the tetrad criterion and its freedom from attenuation; alternative method of correcting for attenuation and of deriving the tetrad criterion. There is appended a list of the symbols used and a bibliography for technical study of the two-factor theory.—*J. A. McGeoch* (Missouri).

4191. *Loosli-Usteri, M. Les interprétations dans le test de Rorschach. Interprétations kinesthésiques et interprétations-couleur. (Interpretations of the Rorschach test. Kinesthetic and color interpretations.) Arch. de psychol., 1932, 23, 349-365.*—Kinesthetic interpretations represent introversion and color interpretations extroversion, the two tendencies not being mutually exclusive in adults. The author showed in a previous work that 50% of normal children from 9 to 14 years of age give color but no kinesthetic interpretations. The latter are more frequently found in asylum children, a fact that indicates a morbid tendency to introversion. The author compared results obtained from 63 boys from 9 to 14 years of age who attended a medico-pedagogical clinic and 63 Geneva schoolboys chosen at random. The following conclusions were obtained: (1) kinesthetic interpretations are not normal for ages 9 to 14; (2) they have nothing to do with intelligence; (3) they go with a certain difficulty in exteriorization; (4) they are found linked with a certain rigidity of thinking; (5) they show introversion; (6) they indicate a profound interest in intrapsychic life; and (7) they represent a stabilizing factor of affectivity. The first results are diametrically opposed to those found by Rorschach for adults, while points 5 to 7 confirm the symptomatic values that Rorschach attributes to kinesthesia in adults. The results from a study of the color interpretations agreed perfectly with those found for adults. The author concludes that the Rorschach test permits not only an analysis of the child's intelligence (from the age of 9), but also an analysis of the affective structure of the individual and the principal lines of his character.—*M. R. Lambergier* (Geneva).

4192. *Louden, M. V. Relative difficulty of vocabulary lists in the Stanford-Binet Scale. J. Educ. Res., 1933, 26, 601-607.*—Study of the results of 218 cases from the files of the Psychological Clinic of the University of Pittsburgh. Three criteria were employed to compare each of the two lists of 50 words recommended by Terman to shorten the time for the giving of the test. The author finds that List 1 is decidedly easier than List 2 at the lower levels of intelligence, approximately equal in difficulty at the 14-year level, and more difficult on the two adult levels.—*S. W. Fernberger* (Pennsylvania).

4193. *McElwee, E. W. The reliability of the Goodenough intelligence test used with sub-normal children fourteen years of age. J. Appl. Psychol., 1932, 16, 217-218.*—The correlation between the mental age on the Goodenough intelligence test and the Stanford-Binet test of 45 subnormal children examined by the author was found to be  $.717 \pm .048$ . This corresponds very closely with the average correlation of .763 which Dr. Goodenough found between the mental age on her test and the Binet for ages four to twelve taken separately.—*E. H. Kemp* (Clark).

4194. *McElwee, E. W. The Primary Cylinder Board. J. Appl. Psychol., 1932, 16, 413-418.*—The Primary Cylinder Board is a form board small enough to permit its being carried by the psychologist as a



part of her equipment. It tests visual-motor coordination to a greater degree than it does intelligence. Its self-correlation is .91 and its correlation with chronological age is .82.—*E. H. Kemp* (Clark).

4195. Nassri, K. *Application du test de Pintner et Paterson aux élèves de cinq classes du certificat d'études.* (Application of the Pintner-Paterson test to the pupils of five certificate classes.) *Encéph.*, 1932, 27, 232-241.—The combined Pintner-Paterson test gave results different from the American ones, and the author declares that this test can demonstrate national as well as individual characteristics.—*Math. H. Piéron* (Sorbonne).

4196. Nemzek, C. L. *Intelligence testing at the college level.* *J. Educ. Res.*, 1933, 26, 617-618.—The following tests were given to a number of college seniors and graduate students at the University of Minnesota: Army Alpha, Miller Analogies, Inglis Test of English Vocabulary, Myers Mental Measure, the I. E. R. Intelligence Scale C A V D, the Trabue Mentimeters, Otis Self-Administering Test of Mental Ability, and the Kuhlmann-Anderson Tests. The values of the coefficients of correlation and their probable errors, number of cases, means and standard deviations are given without comment.—*S. W. Fernberger* (Pennsylvania).

4197. Noll, V. H. *A study of fatigue in three-hour college ability tests.* *J. Appl. Psychol.*, 1932, 16, 175-183.—The subjects used were students who had spent one or two years in a Minnesota State Teachers' College and were transferring to the College of Education of the University of Minnesota. In making this transfer these persons are required by the College of Education to take a battery of college ability tests. This battery of tests requires about three hours of practically continuous work on the part of each individual, and the efficiency of each subject was measured before and after this testing by the Peterson Uniform Equation Completion Test. Neither of the two experimental groups showed any loss in efficiency as measured by scores on the Peterson test after three hours of the type of work described. On the contrary, most of the students appear to be more efficient after the testing than before. An attempt to motivate one group even more than they already had been by the testing situation seemed to have had, if anything, a negative effect on the group. It seems evident that it may be quite safe to require college students to devote at least as much time as is ordinarily done to examination periods without fear either of doing them an injustice from the point of view of measurement or of tiring them unduly.—*E. H. Kemp* (Clark).

4198. Perkins, R. E. *A study of the relation of brightness to Stanford-Binet test performance.* *J. Appl. Psychol.*, 1932, 16, 205-216.—The purpose of this investigation was to study the influence of experience in answering the questions of the Stanford-Binet test. The study was made on 221 Stanford-Binet records. These had been given and scored by experienced examiners and were culled from several thousand tests taken from three sources: (1) The

Institute for Juvenile Research, Chicago, (2) The Elementary School of the University of Chicago, (3) The Skokie School, Winnetka, Illinois. Two experimental groups were used, each composed of children of the same mental age but of different chronological age, so that it was possible to divide them into sub-groups of superior, normal, and retarded children. Tests IX-3 Makes Change, IX-1 Date, XII-7 Picture Interpretation, and XIV-4 Problems of Fact, are definitely "experience" tests, since more retarded children than superior children are able to pass them. Tests VIII-3 Comprehension, VIII-4 and XII-8 Similarities, X-2 Absurdities, X-3 Designs, XII-4 Dissected Sentences, and XII-6 Digits Backward are tests of "brightness," that is, these tests are passed by a greater number of superior than of retarded children of the same mental age. These results are said to agree with those of other investigators.—*E. H. Kemp* (Clark).

4199. Piéron, H. *El desarrollo mental y la inteligencia.* (Mental development and intelligence.) *An. sec. orient. prof.*, 1930, 3, 7-41.—*A. B. Hunter* (Clark).

4200. Sanchez, G. I. *Group differences and Spanish-speaking children—a critical review.* *J. Appl. Psychol.*, 1932, 16, 549-558.—The author believes that "proper accounting for the inferior test results of the Spanish-speaking children cannot be made unless it is in terms of the findings of the field in general, for the fundamental causes to which this inferiority may be attributed are not unique or peculiar to Spanish-speaking children, but represent influences active upon all."—*E. H. Kemp* (Clark).

4201. Simon, T. *L'épreuve du barrage des A ou les difficultés de l'expérimentation.* (The test of battery A or the difficulties of experimentation.) *Bull. Soc. Binet*, 1932, 32, 159-164.—The author goes over Bourdon's test and shows its difficulties of interpretation. He asks whether the success of those who work quickly is not a sign of intelligence rather than of attention.—*Math. H. Piéron* (Sorbonne).

4202. Skalet, M. *A statistical study of the responses of a group of normal children to the individual tests in the Stanford revision of the Binet-Simon scale.* *Psychol. Clin.*, 1932, 31, 183-195.—The results of 295 Stanford-Binet examinations, given to a somewhat superior group of 189 children, were analyzed to reveal any inequalities in difficulty that might exist between tests of the same year-group. A number of such inequalities were found. The tests were then sorted according to type into seven groups, and the groups compared in difficulty. Differences in difficulty appeared between the groups. Tests involving interest in numbers, time, and geometrical form were found relatively difficult, while tests which involved comprehending situations were found relatively easy. Extent of scatter was found to correlate with CA .079, with MA .173, and with IQ .292. The author holds that IQ's should be evaluated in the light of the differences in difficulty between tests.—*J. T. Melcalf* (Vermont).

4203. Skawran, P. **Manual of physical and mental tests, standardized for South African conditions. Part II: Intelligence tests.** Johannesburg: Stich, 1933. Pp. 174. 10.9.—The contents consist of Part I: Single tests: A. Information tests; B. Association tests; C. Memory tests; D. Concentration tests; E. Description of pictures; F. Analogy tests; G. Comparison of concepts; H. Abstraction; I. Comprehension of essential details; J. Comprehension of situations; K. Aesthetic judgment; L. Disarranged sentences, letters, etc.; M. Combination tests; N. Arithmetical reasoning; O. Number completion; P. Comprehension of spatial relations; and Part II: Test series: A. Individual scales; B. Group scales.—O. L. Harvey (Cambridge).

4204. Smith, G. R. **Mental growth—a criticism.** *J. Appl. Psychol.*, 1931, 15, 319-323.—"To get a real mental growth curve we need a measure which can be used without change from infancy to old age." A criticism of an article on mental growth by A. M. Jordan.—R. S. Schultz (Psychological Corporation).

4205. Steinmetz, H. L. **Measuring ability to fake occupational interest.** *J. Appl. Psychol.*, 1932, 16, 123-130.—Retesting under conditions of changed instruction was undertaken with the Strong Vocational Interest Blank in an attempt to measure ability to make scores. Results seem to warrant the following conclusions: (1) Students are able intentionally to distort their scores on an interest blank, and to succeed in qualifying well for an occupation chosen at random, so far as they are concerned, despite a low average initial predilection. (2) Students are able to improve their scores markedly when they try, and this ability is inversely related to true score. (3) Faked marking affects not only the simulated occupational interest of the students, but distorts seriously at least half of the other occupational indications. Experimentation of this sort with personality tests is suggested.—E. H. Kemp (Clark).

4206. Stoke, S. M. **The eight and nine year levels of the Stanford-Binet Scale.** *School & Soc.*, 1933, 37, 459-461.—About 140 children who were being followed in the Harvard Growth Study and had been selected so as to give a random sample of the population furnished the data of the investigation. The number of successes with each of the individual tests of the Stanford-Binet Scale in years six through nine were noted. Tests one and six in year eight proved more difficult, when judged in terms of relative frequency of failure, than any other eight- or even nine-year test. Test one in year seven and test three in year nine were too easy. Test six in year nine (rhymes) was also found to be rather easy, an observation contrary to that reported by Madden, who believes this to be the second most difficult at the nine-year level. The author suggests that a revision of the Stanford-Binet Scale is desirable.—H. L. Koch (Chicago).

4207. Strong, E. K., & Green, H. J. **Short-cuts to scoring an interest test.** *J. Appl. Psychol.*, 1932, 16, 1-8.—The average of correlations between scores on the Strong Vocational Interest Test obtained by the standard method and the short-cut method of only "likes" is .85. With the short-cut method

employing only likes and dislikes, the scores correlate between .908 and .905 with those obtained by the standard procedure, but this short-cut method will not differentiate one occupational group from another as well as the standard procedure. Another short-cut method by Rosenstein and Birnberg, in which the weights used in the standard procedure are reduced from 30 and -30 to 9 to 0, gives scores equivalent to the standard procedure and differentiates occupational groups equally well. This method does not save time in scoring by hand; however, it has an advantage when used with the Hollerith card.—R. S. Schultz (Psychological Corporation).

4208. Thouless, R. H. **Professor H. F. Adams and the two-factor theory of ability.** *J. Appl. Psychol.*, 1932, 16, 374-381.—The author asserts that Adams' argument against the Spearman theory of ability is based upon the use of an entirely different meaning for the symbol  $r_{\theta}$  from that used in the work of Spearman.—E. H. Kemp (Clark).

4209. Váradi, P. **Kritische Beiträge zur Brauchbarkeit der Binet-Simonschen Intelligenztests.** (Critical contributions to the usefulness of the Binet-Simon intelligence tests.) *Monatssch. f. Kinderh.*, 1931, 51, 110-114.—The author criticizes the position of certain tests in the year groups on the basis of a study of 124 6-10 year old children, largely of the middle class.—K. C. Pratt (Michigan Central State Teachers College).

4210. Wechsler, D. **Analytic use of the Army Alpha.** *J. Appl. Psychol.*, 1932, 16, 254-256.—The author is of the opinion that the Army Alpha lends itself better even than the Stanford-Binet to the problem of the diagnosis of special ability or disability. Scores on individual tests which are sufficiently high or sufficiently low to be indicative of special ability or disability have been empirically determined by this investigator.—E. H. Kemp (Clark).

4211. Wheeler, L. R. **The mental growth of dull Italian children.** *J. Appl. Psychol.*, 1932, 16, 650-663.—The data for this study consist of tests of public-school children from ages six to eleven, selected on the basis of the Dearborn Group Intelligence Tests. The gain in mental growth of the six-year group of Italian children shows a trend similar to the seven-year group for four consecutive years. Both groups of Italian children show a decreasing increment of mental growth, i.e., a negative acceleration with an increase in chronological age. This investigation shows that the average dull child is nearly a year mentally retarded when he enters school, and this retardation increases from year to year until at age eleven he has a mental retardation of over two and a half years. No significant sex differences in mental growth are shown for ages from six to eleven. These data may indicate that dull children reach mental maturity earlier than normal and superior children. A fairly consistent but very small difference in mental growth between dull Italian and North European children is not great enough to allow definite conclusions to be made as to racial differences.—E. H. Kemp (Clark).

[See also abstracts 3818, 3869, 3993, 4007, 4011, 4045, 4067, 4101, 4158, 4160, 4165, 4171.]



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